

रजत जयंती वर्ष

वर्षिक प्रतिवेदन 2017 - 18

श्रेष्ठता के 25 वर्ष



भा.कृ.अ.प.-राष्ट्रीय केला अनुसंधान केन्द्र
(आईएसओ-9001: 2015 प्रमाणित संस्थान)



निदेशक



वार्षिक प्रतिवेदन 2017 - 18



भाकृअनुप - राष्ट्रीय केला अनुसंधान केंद्र

(भारतीय कृषि अनुसंधान परिषद)

तायनूर पोस्ट तोगमलै रोड तिरुच्चिरापक्कि ६२० १०२ए तमिल नाडु भारत

उद्धरण

भा.कृ.अ.प.—एन.आर.सी.बी 2018. वार्षिक प्रतिवेदन 2017—18
भा.कृ.अ.प.—राष्ट्रीय केला अनुसंधान केन्द्र, तिरुच्चिरापल्ली

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तिरुच्चिरापल्ली 620 102
तमिल नाडु, भारत

Printing at

PRDAG PRINT

476, Near Boomadevi Kovil, K.N.G. Pudur, G.N. Mills (Po), Coimbatore - 641 029
Ph : 0422 2646036 | E-mail : prdagprint@gmail.com

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आमुख

वर्ष 1993 में स्थापित भा.कृ.अ.प.—राष्ट्रीय केला अनुसंधान केन्द्र, तिरुच्चिलापल्ली केला अनुसंधान पर राष्ट्रीय एवं अंतरराष्ट्रीय स्तर के मान्यता प्राप्त श्रेष्ठता के केन्द्र के रूप में उभरा है और इस वर्ष अपनी स्थापना की स्वर्ण जयंती मना रहा है। मुझे भा.कृ.अ.प.—राष्ट्रीय केला अनुसंधान केन्द्र का वर्ष 2017-18 का वार्षिक प्रतिवेदन प्रस्तुत करते हुए अत्यंत प्रसन्नता हो रही है। इस प्रतिवेदन में केन्द्र में इसके अधिदेश से संबंधित अनुसंधान, शिक्षा एवं प्रशिक्षण की प्रमुख उपलब्धियों को सार रूप में प्रस्तुत किया गया है।

यह केन्द्र, चार प्रमुख क्षेत्रों नामतः फसल सुधार, फसलोत्पादन, सस्योत्तर प्रबंध एवं फसल सुरक्षा पर कार्य करता है। स्वर्ण जयंती वर्ष के दौरान अनुसंधान के परिणामस्वरूप कुछ उत्कृष्ट नतीजे सामने आए हैं जिन्हें यहां उल्लिखित किया गया है। यह पाया गया है कि केले के रस तथा छिलके से निकाले गए रस में कैंसर रोधी गुण होते हैं तथा ये दोनों क्रमशः बड़ी आंत के कैंसर तथा स्तन कैंसर के विरुद्ध प्रभावी हैं। इसी प्रकार, निम्न ग्लाइसेमिक सूचकांकों से युक्त केले की किस्मों की पहचान की गई है और ये किस्में मधुमेह के रोगियों के लिए बहुत उपयोगी हैं। इस केन्द्र में केले के सहपत्र से एंथोसियानिन जैसे जैव अणु सफलतापूर्वक निकाले गए हैं जिन्हें भविष्य में उपयोग के लिए कवचीकृत किया जा सकता है। यह चिंता का विषय है कि फ्यूजेरियम मुझान टीआर-4 की उत्तर प्रदेश में पुष्टि हुई है। यह बिहार के अलावा है जबकि फ्यूजेरियम मुझान जाति 1 को अनेक राज्यों में रिपोर्ट किया गया है। भा.कृ.अ.प.—राष्ट्रीय केला अनुसंधान केन्द्र राज्य कृषि विश्वविद्यालयों तथा राज्य के अन्य विभागों के साथ मिलकर इसके प्रसार को रोकने के लिए लोगों में चेतना फैला रहा है और प्रशिक्षण भी प्रदान कर रहा है। केन्द्र में केले के सहपत्र के चित्ती विषाणु के लिए डिप्टिक प्रौद्योगिकी पर आधारित रोगरोधी मूल्यांकन की विधि भी विकसित की गई है जिसका वाणिज्यिक स्तर के ऊतक संवर्धन उद्योगों में बहुत महत्व है।

यह केन्द्र विषाणु के सूचीकरण, फीडिलिटी परीक्षण, मृदा पोषक तत्वों के विश्लेषण, फलों तथा इसके उत्पादों के पोषणिक प्रोफाइलिंग, पादप सामग्री की आपूर्ति जैसी सेवाओं में रत है। हमने आंध्र प्रदेश तथा एनआईटी, त्रिची; केएनसीआईटी, त्रिची जैसी प्रमुख संस्थाओं से समझौता ज्ञापन पर हस्ताक्षर किए हैं। हमने केले के निर्यात के लिए परिसर में प्रशिक्षण कार्यक्रम उपलब्ध कराने के अलावा सागरीय-प्रोटोकॉल का भी सफलतापूर्वक प्रदर्शन किया है। यह प्रोटोकॉल वायु मार्ग द्वारा भेजे जाने पर लिए जाने वाले प्रभार की तुलना में आर्थिक रूप से अधिक व्यावहारिक और सस्ता है। हमारे बायोवर्सिटी इंटरनेशनल, फ्रांस; क्यूयूटी, आस्ट्रेलिया, आईआईटीए, नाइजीरिया, एनएआरओ-यूगांडा जैसे अंतरराष्ट्रीय संस्थानों तथा 30 से अधिक राष्ट्रीय संस्थानों के साथ संबंध हैं। इस वर्ष हमारे वैज्ञानिकों ने 4.5 करोड़ की जैवप्रौद्योगिकी विभाग की 16 से अधिक नई परियोजनाओं को प्राप्त करके उन पर कार्य शुरू किया है।

किसानों को उन्नत उत्पादन तकनीकों पर मार्ग दर्शन प्रदान करने के लिए हमने एक एकमात्र ऐप विकसित किया है। इस केन्द्र को अपनी गुणवत्तापूर्ण मानक सेवाओं के लिए आईएसओ 9001:2015 प्रमाण-पत्र से प्रत्यायित किया गया है। यह केन्द्र किसान मेला, प्रदर्शनियों, परिसर में व परिसर से इतर प्रशिक्षण देने के माध्यम से किसानों के सशक्तिकरण पर मुख्य रूप से ध्यान देता है और ऐसा इस वर्ष भी किया गया है। भारत सरकार के किसान कल्याण संबंधी कार्यों के अलावा अन्य पहलें भी की गई हैं जैसे मेरा गांव मेरा गौरव (एमजीएमजी); स्वच्छ भारत, हिन्दी पखवाड़ा, कृषि शिक्षा दिवस, अंतरराष्ट्रीय योग दिवस, सतर्कता जागरूकता सप्ताह, साम्प्रदायिक सौहार्द अभियान, राष्ट्रीय विज्ञान दिवस। इस केन्द्र में इन सभी का सफलतापूर्वक आयोजन किया गया है।

मैं डॉ. टी. महापात्र, सचिव-कृषि अनुसंधान एवं शिक्षा विभाग तथा महानिदेशक, भा.कृ.अ.प. का उनके बहुमूल्य मार्गदर्शन तथा समर्थन के लिए हृदय से आभारी हूं। मैं डॉ. ए.के. सिंह, उप महानिदेशक (बागवानी विज्ञान), भा.कृ.अ.प., नई दिल्ली का उनके द्वारा दिए गए प्रेरणा और निरंतर प्रोत्साहन के लिए भी आभार व्यक्त करती हूं। मैं डॉ. डब्ल्यू.एस. ढिल्लान और डॉ. टी. जानकीराम, दोनों बागवानी विज्ञान के सहायक महानिदेशकों (भा.कृ.अ.प.) को भी उनके अनथक समर्थन तथा मार्गदर्शन के लिए धन्यवाद देती हूं। मैं विषय-वस्तु विभाग (बागवानी विज्ञान) के सभी स्टाफ सदस्यों को इस केन्द्र को उपलब्ध कराई गई अनवरत सहायता तथा सहयोग के लिए हृदय से धन्यवाद देती हूं। मैं आरएसी तथा आईएमसी के अध्यक्ष तथा सदस्यों को भी उनके मार्गदर्शन के लिए धन्यवाद देती हूं। इसके साथ ही मैं भा.कृ.अ.प.—राष्ट्रीय केला अनुसंधान केन्द्र के वैज्ञानिकों, तकनीकी, प्रशासनिक एवं सहायी स्टाफ के सभी सदस्यों को इस संस्थान की विभिन्न गतिविधियों में मेरे साथ कंधे से कंधे मिलाकर कार्य करने के लिए धन्यवाद देती हूं। अंततः मैं इस प्रतिवेदन को समय पर सह रूप देने व प्रकाशित करने के लिए प्रकाशन समिति को हार्दिक धन्यवाद देती हूं।


(एस. उमा)

2. Hkfedk

Hkk-d-v-i-&jk"Vh; dyk vul/kku dUn dh LFkku iuk
Hkk-d-v-i-] ub fnYyh }kjk fr : fPpjkiYyh] rfey ukM
e 21 vxLr 1993 dk gb Fkh vkj bl o"kk ;g viuh
j tr t;rh euk jgk gA bldk mnn'; fe'ku
vk/kkfjr eyHkr rFkk dk;uhfrijd vul/kku nF"Vdk.kk
d ek/;e l dy d mRiknu rFkk mRikndrk e of)
djuk gA Hkk-d-v-i-&jk"Vh; dyk vul/kku dUn u
8-47 yk[k gDVj {k= l dy dk vuekfur 30-2 eifVd
Vu oreku mRiknu yu e viuk veY; ;kxnu fn;k
g vkj bl idkj Hkkjr fiNy rhu n'kd k l mRiknu
d lnhk e igy LFkku ij gA bldh Qly tgg igy
?kj d fiNokM mxkb tku okyh Qly d : i e tkuh
tkrh Fkh] ogh vc ;g fiNy 25 o"kk l mPp eY;
okyh Qly cu xb gA bl dUn dk 36-5 gDVj dk
vul/kku Qke rFkk 3-23 gDVj e Qyk gvk i; kx'kkyk
ifj l j gA uxj e Hkk-d-v-i-&jk"Vh; dyk vul/kku
dUn dk 0-80 gDVj dk ,d fgg; 'kh ifj l j Hkh gA ;g
dUn 11-50^o m0 v{k'k rFkk 74-50^o i0 n'kkrj e fLFkr
g rFkk ;g len ry l 90 eh- dh Åpkb ij fLFkr g
vkj ;gk ifro"kk 800 fe-eh- vklr o"kk gkrh gA ;gk
dh tyok; m".k rFkk vkn g rFkk vklr U; ure vkj
vf/kdre rkieku Øe'kh 25 vkj 35^o l- gA

;g dUn vul/kku d pkj ie[k {k=k ukerh
Qly l/kkj] QlykRiknu] lL;kÜkj ic/k vkj Qly
l j {kk ij dk; djrk gA bl lLFkku e Ård lo/ku]
toik[kfxdh] enk foKku] ty ,o ik"kd rRo ic/k]
dkf;dh] toj l k; ufoKku] dhVfoKku] l=dfefoKku]
dodh;] thokf.od] fo"kkf.od] jkxfoKku rFkk lL;kÜkj
ik[kfxdh vul/kku d fy, vfr mRd"V vul/kku
i; kx'kkyk, gA bl lLFkku e 410 ifo"V; k dk
,f'k; k dk lcl cMk QhYM thucd fo|eku g tgg
fo'oHkj d vul/kku drkvk }kjk dy e l/kkj d fy,
mi; kx e ykb tku okyh rduhd k rFkk Hkko h i hf<; k
d fy, ixr rduhd k e mi; kx d fy, l j f {kr fd; k
x; k gA bl lLFkku e mn; ej ,uvkj l hch p; u l kck

vkj cxfj; j t l h ykdfi; fdLe tkjh dh g rFkk
dyk fd l kuk d ykHk d fy, nk vkj p; u tkjh fd,
tku dh ifØ; k e gA mPp djkVuk; M v'k l ; Dr
l dj bl o"kk dh fo'k'krk jg g ftudk cM ieku ij
ijh{k.k fd; k tk jgk gA bl dUn u de ykxr okyh]
fd l kuk d fy, vudy jki.k l kexh dk cM ieku ij
ix.ku fd; k gA bl d l kFk gh bl dUn e mPp ?kuRo
dh jkikb] cukuk 'kfdR ¼, d l {eik"kd rRo feJ.kk
rFkk i; koj.k fe= mRiknu ic/k d fy, l= t l h
ik[kfxd; k fodflr dh xb gA Hkk-d-v-i-&jk"Vh;
dyk vul/kku dUn }kjk Hkkjr e igyh ckj ¶; tfj; e
e>ku m".k dfVc/kh; tkfr 4 ¼, Qvk / h Vhvkj 4½ dk
fjiKV fd; k x; k gA ic/ku ; fDr d : i e Hkk-d-v-
i-&jk"Vh; dyk vul/kku dUn fcgkj d jkxxLr [krk
e bld tuun0; dh NVkb dj jgk gA bl dUn }kjk
j l Fkyh d nk ifrjk/kh mRifjordk rFkk xM u; u d
, d mRifjord dh ,Qvkl h tkfr 1 d fy, igpku
dh xb gA bl dUn e ?kuk d fu;=.k d fy, to
, tV Hkh fodflr fd, x, gA ;gk fo"kk.k dh igpku
d fy, i; koj.k fe= fMi&fLVd fodflr dh xb g
tk fo'oHkj e fd l ku lenk; }kjk l j kgh xb gA bl
lc d vfrfjDr dy d ik/k d fofHkUu Hkkxk dk
mi; kx dj d eY; o/ku l lcf/kr 40 l vf/kd
ik[kfxd; k fodflr dh xb gA ;g lLFkku dyk
mxku okyk dk jkxDr o x.koÜk k jki.k l kexh
miyC/k djrk g rFkk fd l kuk] m|fe; k] Lo; l gk; rk
legk o Nk=k dk ixr mRiknu] l j {kk ,o lL;kÜkj
eY; of/kr mRiknk ij ; Fkkvudfyr if'k{k.k dk; Øe
Hkh miyC/k djrk gA

dUn dh 20 vkrfjd vul/kku ifj; ktuk, rFkk
Hkk-d-v-i-] toik[kfxdh foHkx] ik/kk fdLe vkj d"kd
vf/kdkj l j {k.k ikf/kdj.k] HkkHkk ijek.k vul/kku
dUn] foKku ,o ik[kfxdh foHkx] ck; kof l Vh
bVju'kuy t l h fofHkUu , tfl; k dh fuf/k l gk; rk
iklr 27 ck; ifj; ktuk, gA pkj l fonk vul/kku



ifj;ktuk, ijh gk pdh g rFkk dy dh nIh fdLek
t l uUnu vkj u; iou dk lenh ekx l n'k d ckj
Hktu o dy dk cM ieku ij ix.ku dju d fy,
Ård lo/ku i; kx'kkyk, LFkkfir dju d fy,
l kotfud o futh l k>nkjh d ekM e ,ihMk dk
ijke'k lok, inku dh xb gA vul/kku ikFkfedrkvk
ij ifjn'; ;ktuk vkj ifjn'; 2030 o 2050 t l
nLrkot Hkh r;kj fd, x, g ftue D;vkjVh rFkk
vkj, l h dk cgeY; ;kxnu iklr gvk gA dUn e
l LFkku vul/kku ifj"kn rFkk vul/kku lykgdkj
ifj"kn dh cBd vk; kft r dh xb g rkfd py jgh
vul/kku ifj;ktukvk dh leh{kk dh tk l d rFkk
vkj, l h vkj D;vkjVh dh flQkfj'kk ij gb ixfr dh
fuxjkuh dh tk l dA Mk- , l-, u- ik.M] lokfuokk
lgk; d egfun'kd %ckxokuh fokku% Hkk-d-v-i-] ub
fnYyh dh v/; {krk e vul/kku lykgdkj lfefr u
dUn dh vul/kku xfrfof/k; k dh leh{kk dh g rFkk
Hkkjr e dy d fVdkÅ mRiknu rFkk mRikndrk d
fy, Hkkoh vul/kku xfrfof/k; k dh flQkfj'k dh gA

nf"V

dy d mRiknu ,o mRikndrk e fo'o dk urRo
djuk vkj bl idkj Hkkjr e dy dh c<rh gb ekx
dk ijk djukA

vf/kn'k

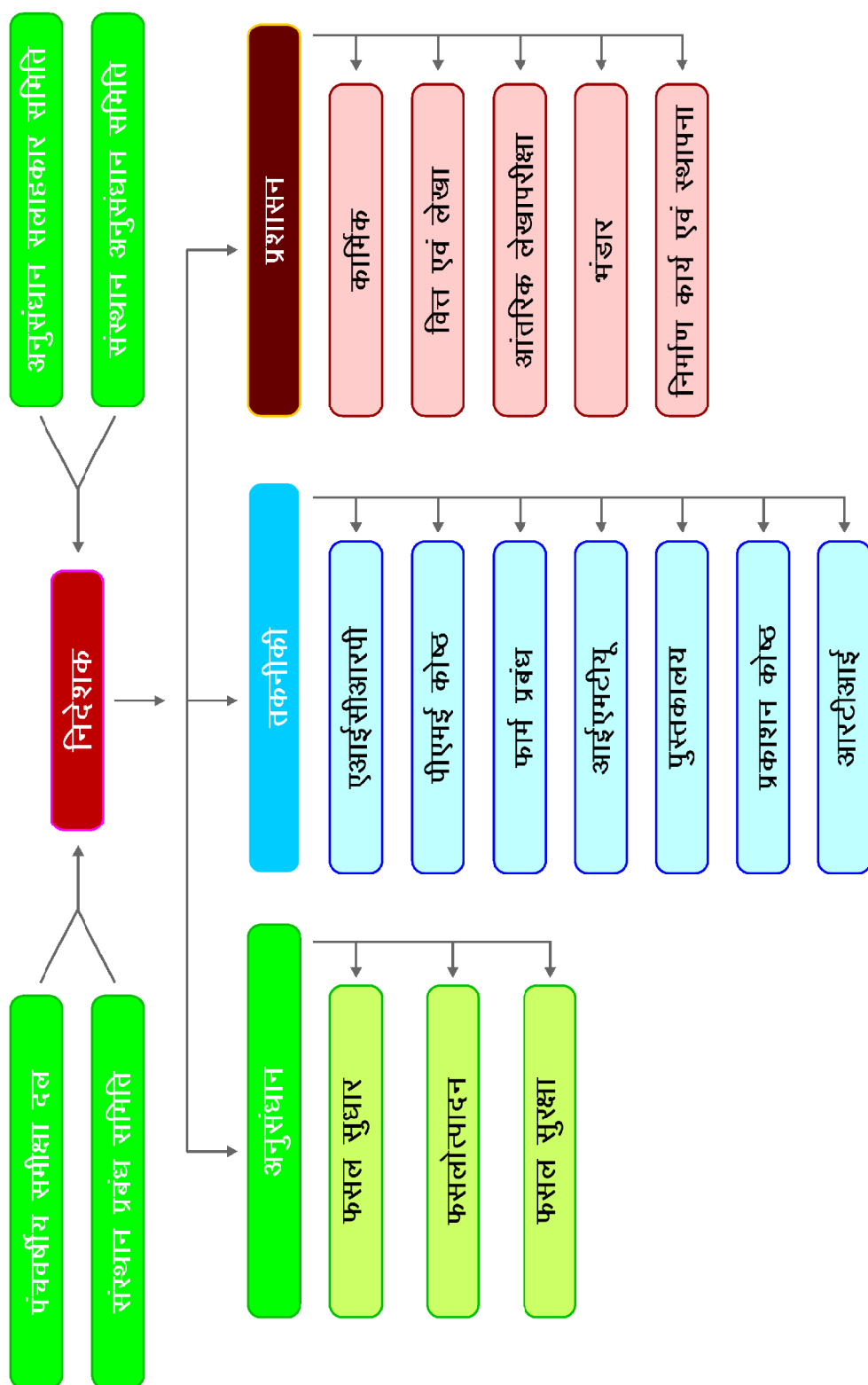
- ◆ vkuof'kd l l/ku ic/k] Qly l/kkj vkj mRiknu
ik l kfxfd; k ij eyHkr] dk; uhfrijd o
0; kogkfjd vul/kku djuk rkfd dy dk fVdkÅ
mRiknu o mi; kx djr g, blg c<k; k tk, A
- ◆ jk"Vh; dyk thucd dk ic/k] dy dh mRikndrk
dk c<ku o m l fVdkÅ cuku d fy, vul/kku
dk lelo; u ,o lR; ki uA
- ◆ dy d c< g, o fVdkÅ mRiknu d fy, fgr/
kkj dk dh {kerk fuek.k d l kFk&l kFk ik l kfxdh
dk glRkrj.kA
- ◆ l {e&iof/kr dy d ik/kk dh x.koUkk dh fuxjkuh
d fy, l nHk i; kx'kkykA

o"k 2017&18 d fy, ctV dk fooj.k %i; yk[k e½

y[k dk 'kh"ki	0; ; %i- yk[k e½
midj.k	0-00
LFkk iuk	571-77
le; k ifj HkUkk	0-00
; k=k HkUkk	15-99
vul/kku 0; ;	56-99
ifjpkju 0; ;	66-00
voljpuk	144-97
lpkj	23-28
midj.kk] okguk vkfn dh ejEer	22-03
dk; ky; Hkou	62-97
vkok l h; Hkou	19-92
vU; i'kk lfud 0; ;	22-77
QVdj	1-98
ekuo l l/ku fodk l	0-00
ipkj ,o in'kuh	0-99
i'ku ,o lokfuofUk ykHk	29-92
dy	1039-58

foUk o"k 2017&18 d nkjku dUn }kj dy 81-85 yk[k #i; dh jkf'k lft r dh xBA

भा.कृ.अ.प.-राष्ट्रीय केला अनुसंधान केन्द्र का संगठनात्मक ढांचा





3. fof'k"V I kjk'k

QIy I/kj

vle] v#.kkpy in'kj ukxkyM vkj ef.kij lfrg Hkkjr d mÜkj&ion {k= e fd, x, lo{k.k d ifj.kkeLo:i ,e- ukxf'k;e lfrg E; l k dh 15 ifof"V;k dk l dyu fd;k x;k gA buG igyh ckj Hkk-d-v-i-&jk"Vh; dyk vul/kku dUn }kj k v#.kkpy in'k d pkxykx l ldfyr fd;k x;k gA f}rh; d lkrk l ,d= dh xb dy 29 ifof"V;k thud e 'kkfey dh xba bld vykok Hkk-d-v-i-&,uchih thvkj] ub fnYyh d ek;/e l vkbVh l h] cfYt;e l yxHkx 73 fon'kh ifof"V;k Hkh ;gk ykb xb gA mPp mi t 'khy uUnu] fDoVy uUnu] vW uUnu] Lo.ke[kh vkj u; iou lfrg uUnu okf.kfT; d fdLe d J"B Dyku ,df=r dj d LFkfr fd, x, gA pkj l dj l rfr;kj 11 nlh ifof"V;k rFkk 4 vkbVh l h ifof"V;k dk vkdfr&oxhdj.k foKkuh y{k.k o.ku ijk fd;k x;k g ft l d ifj.kkeLo:i mud thukeh rFkk mi legk dh igpku dh xb gA 81 vuk[kh tuun0; ifof"V;k %0623553 l 0623633% d fy, vkb l h l [;k, iklr dh xb gA ik/k d fofHkuu Hkkxk t l ijk dh ukd] midn rFkk uj i"i dfydk d l kFk&l kFk ?kudnk d rhu fofHkuu Hkkxk l 0; RiUu m]e fdLe d [kr eY;kdu d ifj.kkek l ;g l dr feyk g fd i"i dfydk l 0; RiUu ik/kk l cgrj mi t iklr gkrh gA ¶; tfj;e e>ku jkx l xLr lykVh dh NVkb d ifj.kkek l ;g l dr feyk g fd rhu , , f}xf.kr nk ,e- ckYchf l ;kuk idkj] nk dofM'k Dykuk] lkr elj idkj] ikp ike idkj rFkk ;uhd vkj l dj ifof"V;k] iR;d l ,d&,d dk Fkuh ,Qvk l h %oh l h th 0124% dk ifrjk/kh ik;k x;k gA ,uvkj l hch p;u 11 %eukjft re fof/kd% dk fu"iknu Åpkb oky {k=k e cgrj ik;k x;k gA ,uvkj l hch p;u 8 %ckfx; j% vkj ,uvkj l hch p;u 9 % l kck% dk ykdfi; cuku d fy, ukxjdbky vkj dU;kdekjh ftye LFkfr vx ifDr d in'kuk l ;g l dr feyk g fd ru dh i"V ekVkb

d dkj.k bud ik/k pØokr dk Hkh lg l du e l eFk g vkj bul l keU; mi t iklr gkrh gA ch, vkj l h d vkb cku mRifjork e l Vhch, e 9 u fd l kuk d [krk e cgrj fu"iknu fn;k gA tofj, DVj dk mi; kx dj d Hk.k tfur dkf'kd fuycu lo/ku l cM ieku ij ik/kk d vxk d mRiknu dh rdudh dk dy dh fofHkuu fdLek t l xkM u; u] j l Fkyh rFkk l ckj d fy, ekudhdj.k fd;k x;k gA th l h, e, l fo'y" k. k l ;g l dr feyk g fd pkj ok"i 'khy ;kfxd uker% vk d l k l kbDyk g d l k fmd u&2&ou %1-13%½] 2&MkM l kbDykC; Vuku %0-65%½] Økb l Vukby 2&eFkby C; Vuku, V %0-95 ifr'kr% vkj g d l kfud vEy glV kMdkby ;hLVj %0-49 ifr'kr% dy dh eukjft re fdLe e fof'k"V x/k d fy, mÜkjnk; h gA ikoLFkk luUnu vk/kkfjr l rfr;k dk eY;kdu fd;k x;k rFkk ,ulhv kj 19] ,ulhv kj 21] ,uih, y 28] ,uih, y 30 vkj ,uih, y 36 u viu tudk dh ryuk e mPprj mi t %>15 fd-xk-% fjd kM dhA mPp mi t rFkk idku dh J"B x.koÜkk d fy, igpkuh xb l rfr l [;k 685 % l kck x i h l kx fyfyu% rFkk l rfr l [;k 690 % l kck x fi l kx fyfyu% dk fji kVh/khu vof/k d nkjku eY;kfdr fd;k x;k rFkk ; eknk tud dh ryuk e Øe'k 81 vkj 64 ifr'kr mPp mi t nu okyh fl) gA eFkyki je] Fkuu] rfey ukM e fdLe j l Fkyh d 35 l; Vfo mRifjork d jkxxLr lykVh dh NVkb l ;g l dr feyk fd ,uvkj l hch vkj, e 217 vkj ,uvkj l hch vkj, e 100 tk xeyk lo/ku d vrxx ifrjk/kh ik, x, Fk] vkrfjd jkxLdkj Øe'k 5 vkj 6 d ckotn 10 fd-xk- o 12 fd-xk- l keU; xPNk mi t nr gA geu dy dh 10 fdLek dh mPp j l /kkuh ;Dr ,d dUnd voLFkk dh igpku dh g tk l keU; r% l [;k 16 % i k i k m y % l l [;k 32 % x k M u ; u % d l g i = e f l F k r g k r k g A ; g v o L F k k D y k u @ o ' k Ø e k d v u l k j v y x & v y x g k r h g r F k k , u i h , y % 1 8 %] , u l h v k j % 2 7 %] , u v k i h % 2 3 %] j l F k y h % 2 3 %] t j e k u h % 1 9 %] i o u % 2 6 %] d j i j k o Y y h % 1 7 % v k j u U n u % 2 2 % d

Øe dk viukrh gA lkekU; r% ,d dUnd dh voLFkk
ijku lgi=k e rc n[kh xb tc i"i dfydk dk
lgi=k ij de l [; k e {kr l ;Dr MBy l ,d=
fd;k x;kA

MlyhdV e 40 ifofV;k d jkxedr LoLFk ?kudn
Hkk-d-v-i-&jk"Vh; dyk vul/kku dUn dk vkir fd,
x, rkfd mudk Loik= l j{k.k fd;k tk l dA tuun0;
d jkxedr LoLFk ?kudn ;, , l] vjkHkkoh(cdxokuh
foHkkx] cLrh %mÜkj in'k% (Vh, u, ;] dk; EcÜkj] Hkk-d-
v-i-&vkj l hlvkj] {k=h; dUn] jkph(df"k foKku dUn]
vfj; kyj vkj ,Qvkj, l] oxyk dk eY; kdu d mnn';
l forfjr fd, x, A m|e dy d ik/kk d lof/kr
yxHkx 5949 Ård mRl d fd l kuk dk ckV x, A m|e
fdLe d yxHkx 250 ijkg 'kh"K Hkh cM ieku ij
ix.ku d mnn'; l futh Ård lo/ku mRiknu dUn
dk vkir fd, x, A m|e rFkk xkM u; u okf.kfT; d
fdlek d ik"kd lo/ku cM ieku ij ix.ku d fy,
,d vU; mRiknu dUn dk vkir fd, x, A

QlykRiknu ,o lL; kÜkj ik| kfxdh

u; iou %jru 2% e 'k"d inkFk d mRiknu e
Øe'k(of) n[kh xb tk vkjfhkd voLFkk e ukbVktu]
QkLQkj l vkj ikV'k d vkjMh, Q e c< g, Lrj l
ydj rMkb dh voLFkk rd 150 ifr'kr FkA 150
ifr'kr vkjMh, Q ij 12-62 fd-xk- dk lokPp 'k"d
inkFk mRiknu fjdkM fd;k x;k tcfd ryuh; e ;g
10-66 fd-xk- FkA u; iou d xPNk dh rMkb d ckn
cp vif'k"V dk iu% feyk dj iu'pfØr@feyk, x,
ik"kd rRok dh ek=k %fd-xk-@g-% Kkr dh xBA xPNk
dh rMkb d i'pkr u; iou d ,d ik/k l lft r oeh
dEikLV e vklr ik"kd rRo v'k d lnhk e
ukbVktu&101-13 xk-] QkLQkj l 14-20 xk-]
ikVf'k; e&176-62 xk-] rkck&0-63 xk-] exuht&2-22
xk-] tLrk&0-53 xk- vkj ykg rRo& 1-25 xk- ik, x, A

j lFkyh %jru&1% e ukbVktu] QkLQkj l vkj
ikV'k d vkjMh, Q d c<r g, Lrjk ij 'k"d inkFk
d mRiknu Lrj e /khj&/khj of) n[kh xb tk rMkb

dh voLFkk e 150 ifr'kr rd gk xBA lokPp 'k"d
inkFk dk mRiknu %18-56 fd-xk-% 150 ifr'kr vkjMh, Q
ij fjdkM fd;k x;k tcfd ryuh; e ;g 13-91 fd-
xk- FkA xPNk dh rMkb d i'pkr j lFkyh d ,d ik/
k l lft r oeh dEikLV e vklr ik"kd rRo v'k d
lnhk e ukbVktu&89-15 xk-] QkLQkj l 17-89 xk-]
ikVf'k; e&174-09 xk-] rkck&0-69 xk-] exuht&1-63
xk-] tLrk&0-67 xk- vkj ykg rRo& 1-23 xk- ik, x, A

dy dh tfod [krh d vrxr iÜkh e lokPp
ik"kd rRo lknrk %ifr'kr% dDdV [kkn \$ exQyh
dh [kyh \$ xkeh.k dEikLV \$ ydMh dh jk[k \$
oh, ,e \$ ih, lch \$ d, lch dk 20 iÜkh dh voLFkk
rFkk ijkg mxu dh voLFkk d nkju feyku ij fjdkM
dh xBA 20 iÜkh dh voLFkk rFkk ijkg mxu dh
voLFkk ij blh mipkj l; kx l ik/k }kj lokPp
ik"kd rRo mnxg.k %xk-@ik/kk% fjdkM fd;k x;k tk
100 ifr'kr vdkcfud mojdk d mi; kx }kj iklr
gku oky ifj.kke d cjkcy FkA uUnu rFkk iou fdlek
dh jru ;k iMh dh Qly d fy, xPNk ic/k dh fof/
k Hkh r; kj dh xb gA

iÜkh m|kx d fy, ifr Vhyk okf.kfT; d fdLe
iou d rhu idnk l lof/kd rMkb ;kx; ifÜk; k
mRiUu gb ft l d i'pkr ifr Vhyk Øe'k 4 vkj 5
?kudnk dk LFkk FkA blh idkj] ifr Vhyk 3 l 5
?kudn jkdu l iÜkh d dy {k= e Hkh fhkUurk n[kh
xBa

lL; kÜkj l k t& lHkky d mUur mipkj e ikyhcx
e id dj d 13-5° l- d rkieu ij 'khr xg e
HkMkj.k l dy dh xkM u; u fdLe dh fu/kkuh vk;
75] 85 vkj 95 ifr'kr ifjiDork d lnhk e Øe'k
108] 94 vkj 60 fnu c< xb tcfd bl d x.koÜkk
l c/kh ikpyk e dkb fxjkoV ugh vkbA mUur lL; kÜkj
mipkj d l kFk 80&85 ifr'kr ifjiDork ij rkM x,
uUnu dk tc 13-5° l- ij HkMkfjr fd;k x;k rk
bl dh fu/kkuh vk; 32 fnuk rd c< xBA dy dh xkM
u; u fdLe d Qyk dk idku d fy, viukb xb



fofHkUu fof/k;k e l bfFkyhu x l ¼24 ?kV d fy, 100
ihih,e½ l mipkfjr Qyk dk jx le:i fodflr
gvk rFkk d{k rkieku ij mudh fu/kkuh vk; e Ng
fnuk dh rFkk 22^o l- d rkieku ij HkMkfjr dju ij
12 fnuk dh of) gbA

J"B lonh x.kk l ;Dr l kj 'k"dd dh ryuk e
fuokr 'k"dd l ¼300 feuV rd½ dy d VdMk l ty
dk cgrj <x l gvK;k x;kA rkieku e of) gku l
dy dh ijhf{kr fdLek d Qyk e Qyko e of) n[kh
xbA dy dh puh gb fdLek e ,ekbykt v'k d
ifr'kr e mYy[kuh; vrj ik;k x;k tk 19-87 l 22-
32 ifr'kr d chp vyx&vyx FkkA uUnu] xkM u;u
vkj l kck dh ryuk e ekFku e lokPp MCY; , l h n[kk
x;kA QkLQkjhdr LVkp l : ikrfjr LVkp mRiUu
gvk ft le ifrjk/kh LVkp dk vU; fof/k;k dh ryuk
e mPp v'k ¼25-7 ifr'kr½ fjdkM fd;k x;kA dy d
LVkp rFkk : ikrfjr LVkp e dy d vkV dh ryuk e
XydkT dk vi{kKdr de ek=k e vf/k'kk"K.k fjdkM
fd;k x;kA 65½25½10 d enk % dy d vkV o : ikrfjr
LVkp }kjk r;kj fd, x, ikLrk e Hkh XydkT dk
vi{kKdr de vf/k'kk"K.k fjdkM fd;k x;kA

Nne ru e j'k dh lokPp olyh rFkk VVu
'kfDr] VVu foLrkj] VD l rFkk rU; rk t l x.k Hkh yky
dy d j'kk e vi{kKdr J"B ik, x,A dy d j'kk l
xkn fudkyu d fy, ydt mipkj l mldk jk l k;fud
l ?kVu J"B cuk jgk rFkk Hkkfrd jk l k;fud x.k Hkh
vPN cu jgA

Q:fyd vEy dk thok }kjk mRiUu gkr g,
ik;k x;k gA 24 ?kV d Å"ek;u d ifj.kkek l ih,u
1] l hMh,Q 2 rFkk Ig&lo/ku l l jkfir ueuk e
Q:fyd vEy dh mifLFkr inf'kr gbA uUnu fdLe
d dy dk fNydk Qfjd dk de dju e vf/kd l {ke
g rFkk 55-10 ¼vkb l h₅₀½ eDr eyd fujk/kd e ;g
'kkfey jgrk gA uUnu fdLe d dy d fNydk d l r
e mPp ½yokukbV v'k Fkk ft l d dkj.k bldh
ifrvkD l hdkjd fØ;k okyk x.k fojeku gkrk gA

bl d vfrfjDr bud dkj.k Lru dkf'kdvk d vkn
dk lokPp fujk/k Hkh inf'kr gvKA xkt j d j l dk 70
ifr'kr feykr g, ¼ifr vkD l hdkjd d : i e½ rFkk
pdnj d j l dk 90 ifr'kr feykr g, dy d vkV
ij vk/kkfjr QfYyr mRiknk dk ekudhdr rFkk fodflr
fd;k x;kA

dy dh okf.kfT;d fdLe xkM u;u e idk'k
i.kkyh LokLF; l c/kh dk; dk fo'y"K.k l [kk ifrcy
d vrxr fd;k x;k ft le l [kk c<ku oky j l k;uk
dk mi;kx djd ;k mudk mi;kx fd, fcuk D;k
ifj.kke gkrk g] bl dk eY;kdu fd;k x;kA [, f l Vkyb
l fyflfyd vEy ¼, , l , ½ \$ C; VkyfVM gkbMkD l h
Vkyhu ¼ch,pVh½ l ikbe fd, ik/kk e xj ikbe
fd, x, l [kk ifrcy oky ik/kk dh ryuk e 65
ifr'kr vf/kd idk'k l 'y"K.k fjdkM fd;k x;kA
ikdfrd idk'k d vrxr enk e ueh dh deh d
vrxr dy dh ek=kRed mit ¼Yit½ rFkk Fv/Fm vuikr
fuEu idk'k dh n'kk ¼50 ifr'kr ikdfrd idk'k½ dh
ryuk e de fjdkM fd;k x;kA

ihih,Q,e ¼fid fiXefVM QdYVfVo
eFkkbykVki½ ikbe fd, x, rFkk l [kk dh n'kk lft r
djd mld vrxr j[k x, ik/kk e , , l , mipkfjr
dh ryuk e Øe'k 9-75 fdxk- vkj 12-32 fd-xk- dh
of) fjdkM dh xbA

of) fu;ked d : i e ikVf'k;e l YQV ¼1-5
ifr'kr½ dk xPNk ij fNMdko d : i e mi;kx dju
l enk e ueh dh deh d vrxr mx dy d ik/kk e
Qyk d Hkkj e l [kk ifrcy e mx ik/kk dh ryuk e
17-35 ifr'kr dh of) okf.kfT;d fdLe xkM u;u e
n[kh xbA

ckjg ?kV d fy, 1 ekbØk fyVj@fyVj ¼500
ihih,e½ dh nj l xkM u;u d 1&,e l ih l mipkfjr
dy rhu fnuk e bfFkyhu d fNMdko l id x,
yfdu 1&,e l ih l mipkfjr dyk d Lor½ idu e
7 fnu dk le; yxkA

1&,elhih l mipkfjr lL;kÜkj iou dyk e
dy ?kyu'khy Bk l ½Vh, l, l ½ vkj vEyrk dk fo'y"K.k
Lorh ifjiDou o bffkyhu d mipkj }kjk ifjr dy
d ifjiDou d lnhk e fd;k x;k vkj ;g ik;k x;k
fd bue Vh, l, l rFkk vEyrk dk Lohdk; Lrj gkrk
g tk vuipkfjr ryuh; Qyk d leku gh gkrk gA

ifjiDou dh 5 vkj 6 voLFkkvk ij dy dh 6
okf.kfT; d fdLek e Xykb l fed l pdkd ¼ thvkb½ dk
fo'y"K.k fd;k x;k ft l l ;g l dr feyk fd voLFkk
5 ¼ukd ij gjkiu½ e voLFkk 6 ¼i.k ihykiu½ dh
ryuk e vi{kkdr fuEu thvkb gkrk gA ryuh;
fdLek e l ub iou e djijoYyh o xkM u;u dh
ryuk e lokpp thvkb n[kk x;kA LVkp ;Dr okf.kfT; d
fdLe ekFku e U;ure thvkb Fkka

uj i"i dfydk d Ng lgi=k e ,Fkkl ;kfuu
jtd dk v'k vyx&vyx Fkk tk u; iou e lokpp
57-8 fe-xk- o xkM u;u e jtd mRiUu dju oky
lgi=k e ifr lgi= 100 xk- Fkka vU; mit'khy
fdLe Fkh ¼ fgy cukuk ¼57 fe-xk-½ iou ¼55 fe-xk-½
j l Fkyh ¼54-7 fe-xk-½ ipkunu ¼53 fe-xk-½ vkj uUnu
¼52-5 fe-xk-½A

iou lgi= d ,Fkkl ;kfuu e ikp ;kfxd Fk
ftud cu jgu dk le; 2-5] 2-7] 5-9] 10-0 vkj 10-
4 feuV e Øe'k 3] 7] 26] 28 vkj 36 ifr'kr Fkka
uUnu d i"i lgi=k l 52 fe-xk-@100 xk- rk tk Hkkj
dh nj l ,Fkkl ;kfuu jtd fu"df"kr fd, x,] blg
fNMdko }kjk l [kk;k x;k rFkk ifr dop 400 fe-xk-
dh nj l dopldr fd;k x;kA

Qlyk l j{kk

dy d uj o eknk ?kuk rFkk l onu'khy fdLek
¼djijoYyh] uUnu vkj iou½ l ik"kd ik/kk l tkjh
fd, x, ok"i'khy ;kfxdk d df=e vuky x l uj
rFkk eknk ?kuk d chip <40% vkd"K.k inf'kr gvka
djkeku ;kfxdk ¼glVu] 2&eFkby&4&iVxxy]
glVkmhduj vkdVkmhduj 4&bFkby&, l VQkuku vkj

VVkmhdu dh 0-5 l 2 ifr'kr l knrkvk ij d Loik=
ijh{k.k e uj rFkk eknk ?kuk d chip 20&40 ifr'kr
vkd"K.k inf'kr gvka ft le eknk ?ku vf/kd Fkka Ng
dk; kRed legk d vrxx vku oky ekg l ifjr gku
oky ok"i'khyk dh th l h&,e, l }kjk igpku dh xba
¶; tfj;e e>ku l xLr [kr e mxk, x, E; /k
tuun0; o'kØek e dy d ?ku d l Øe.k l l cf/kr
fjdkM l ;g inf'kr gvka fd ¶; tfj;e e>ku jkx d
dkj.k Nne ru d vk/kkj d QV tku d dkj.k dy
d ru ij ?ku dk l Øe.k gkrk gA ?ku l l Øfer dy
¼okf.kfT; d fdLe u; iou½ d i=kPNn l ikl fd,
x, ok"i'khy d fo'y"K.k l ;g irk pyk fd mue
dk; kRed leg uker ,YmHgkbM ¼1½ MkbdkckekbM
¼1½ rFkk olk vEy ;hLVj ¼,Q,b½9½ mifLFkr gkr gA

Hkkjr e dyk d uk"kd thok d ekuf=.k d
vrxx fo'o e igyh ckj dkQu D; ih] ,Y; jkykcl
E; lh vkj cflyV l cdLVkV l lhvk1 thu vuØfer
fd;k x;kA dy dh dvfd;k] Qy d eRd.k] tM d
eRd.k] y l fox eRd.k] l Qn eD[kh rFkk Ldy d
ikdfrd 'k= ¼ij th0; kHk@ijHk{kh½ iyf[kr fd, x,A
gky gh e fjikV fd, x, vkØked uk"kd th0 : xk t
Libjfyx l Qn eD[kh] ,y; jkfm l #QijD; yV l
dh fuxjkuh dh xb rkfd rfey ukM e bl d vkj vf/
kd ilkj ij utj j[kh tk l dA

mÜkj in'k ¼Qtckkn½ e/; in'k ¼cjgkuij½
xtjkr ¼l jr½ if'pe cxky ¼ukfn;½ rFkk dukVd
¼fpDdcYykij vkj cxy:½ e dy dh xkM u;u
fdLe e ¶; tfj;e e>ku d l Øe.k d fy, fd, x,
ikFked lo{k.k l dukVd d vykok vU; l Hkh jkT;k
e bl dk idki ¼10&50 ifr'kr½ fjdkM fd;k x;kA
¶; tfj;e e>ku d y{k.k&o.ku l mÜkj in'k e
bl dh m".kdfVc/kh tkfr 4 dh mifLFkr dk rFkk
vU; jkT;k e i tkfr 1 dh mifLFkr dk l dr fey kA

l=dfe d dy 17 foyxd vuØfer fd, x,
rFkk mUg ,ulhchvkb e iLrr fd;k x;kA ijhf[kr
to fu;=.k rFkk okuLifrd , tVke l cfly/ tkfr



dk tM d {kr l=dfe vFkkr dy dh okf.kfT;d fdLe uUnu ij xeyk dh n'kk d vrxr ifvyd/ dkQh uked l=dfe d fo#) iHkkoH ik;k x;kA dy dh okf.kfT;d fdLe dukb cIh vkj U;Vikx dk tM xkB d l=dfe eykbMkxk;u budkXuhVk d ifr gYdk ifrjk/kh ik;k x;kA pkj dhV jkxtud l=dfe %biH,u% foyxd uker% jCMhfVI j bub/ LVbuuek fI;kedk;kb %nk foyxd% vkj gVjkjCMhfVI bfmdk dk Loik= n'kkvk d vrxr dy d ru d ?ku d fo#) foyfxr dj d mudk ijh{k.k fd;k x;kA

b: I/h iÜkh /kCck l lØfer dPp Mh,u, dk foyfxr dju dh ,d Rofjr o lLrh fof/k fodflr dh xb bl fof/k e ih lhvkj fo'y"K.k d fy, Mh,u, dk foyfxr dju dh lkeU; fof/k dh ryuk e doy 2 ?kV yxr g tcf d ih lhvkj fo'y"K.k e 18 ?kV dk le; yxr gA bl fof/k dk dodh; ekbflfy;e l Mh,u, dk foyfxr dju d fy, Hkh mi;kx e yk;k tk ldrk gA yEi fof/k }kjk b;E; I/h iÜkh /kCck jkxtud d funku dju dh fof/k dk lR;kiu fd;k x;kA ,e- b;E; I/h jkxtud l iklr fo'kky ;kfxdk dk y{k.k&o.ku fd;k x;k rFkk VkfDlu 1 %Vh1% dk cgrj ik;k x;kA VkfDlu Vh1 d th lh&,e, l fo'y"K.k d ifj .kkeLo: i 3 fofHkuu ;kfxdk uker% VkkeFkkD l h fIyoku/ Dohuh tkfju rFkk p-ctkDohuku Mk;kD l kbe dh igpku dh xBA ifuflfy;e fiukfQfy;e %12 Mh,Q% l nk to l fØ; ;kfxdk %0-01&0-5 xk-@fe-fy-% dk th lh@,e, l }kjk igpku dj 'k) fd;k x;k ft l l ,e- b;E; I/h d ekbflfy;e dk 100 ifr'kr fujk/k inf'kr gvk rFkk b- fuMyk l %9Mh,Q% l foyfxr ,d vU; ;kfxd }kjk doy 0-25 vkj 0-5 xk-@fe-xk- dh lknrvk ij gh 100 ifr'kr fujk/ k inf'kr gvkA rFkfi] bu rhuk ;kfxdk l ,e- b;E; I/h d chtk.k vdk.k dk 100 ifr'kr Loik= fujk/k inf'kr gvkA

dy %okf.kfT;d fdLe uUnu% e ukd rFkk MBY l Mu jkx mRiUu dju oky jkxtud d vkbvH, l &vkjMh,u, vuØe fo'y"K.k }kjk y{k.k&o.ku

l ;g Li"V gvk fd bl d dkjd , tV fI; tfj;eDyebMkL ikje vkj yfI; kfmlykbM; k fFk; kckeh d vrxr vkr gA Loik= , Q- DyebMkL ikje d fo#) ftu Ng fofHkuu doduf'k;k dh tkp dh xb mue l rhu doduf'k;k uker% Vcdkutky \$ Vkbflfy;D l hLVkfcu %ufVok% dkcumfte vkj ikfi; kdkutky %fVYV% l jkxtud dh ekbflfy;e of) dk 100 ifr'kr fujk/k fjdkM fd;k x;kA dkcumfte rFkk fFk;kQuV efkby %jkd% l ,y- fFk;kxkeh dh ekbflfy;e of) dk 100 ifr'kr fujk/ k fjdkM fd;k x;kA

rfey ukM] vk/k in'k rFkk if'pe cxky e dy d idn l Mu jkx ij fd, x, lo{k.k l fofHkuu fdLe e 8 l 10 ifr'kr jkx d idki dk irk pyk rFkk Ård lof/kr dy dh ik/k e ;g l Øe.k mPp ek=k e FkA ;g l Øe.k jkikb dh vxrh voLFkk %jkikb d 2&5 ek g ckn% n[kk x;k rFkk idn l Mu jkx d jkxtud d 36 fofHkuu foyxd foyfxr fd, x,A idn l Mu jkx.k dh jkxtudrk dy dh u; iou fdLe d ik/k e Hkh iekf.kr gBA

rhu vU; foyxdk d l Fk mÜkj ioh iorh; {k= e dy d lgi= fpÜkh fo"kk.k %chchvkj,eoh% d l Ei.k thuke dh ryuk l tkfr oÜkh; of e Li"V fHkuurk inf'kr gBA dy 49 chchvkj,eoh foyxdk e l ,d foyxd %Vh,u11% e iu l ;kx dk iek.k fjdkM fd;k x;kA y l fox erd.k %LVQuFVI Vkbfi d% t l vrfjDr okgd d vykok chchvkj,eoh d ch t }kjk Qyu dh Hkh if"V gBA E; l k vkukV e l h,eoh dk gkuk igyh ckj fjdkM fd;k x;kA ,eohvkj&vkj,u,vkb rFkk g;j fiu&ji %chchVhoh% dkLVdV dk mi;kx dj d iorh; dy d 22 l;VfVo ijktuh o'kØe fodflr fd, x,A bl h, l l 0;RiUu dy d xFPNr pM fo"kk.k %chchVhoh% l eDr iorh; dy d ik/kk e ?kudn }kjk mxk, x, ik/kk dh ryuk e iMh dh nIjh Qly e of) rFkk mit l c/kh ikpyk e mYy[kuh; Hkn ik;k x;kA rFkfi ;g Ård lo/ku }kjk mxk, x, ik/kk d cjkcj FkA

ik"kd&dy d xfpNr pM fo"kk.k %chciVhoñ dh
vrjfØ;k d v/;;u d fy, ikfV;kfed fo'y"%.k d
vrxr *bu f/fyd*k fo'y"%.k d ek/;e l okf.kfT;d
fdLe uUnu e Ng bvkb,Q4b dh igpku dh xBA
thu fo'k"V ikbejk dk fMtkbu dju rFkk ihlvkj
n'kkvk d ekudhj.k d i'pkr okf.kfT;d fdLe
uUnu l iklr l Hkh Ng bvkb,Q4b thuk dk vkof/kr]
Dyku vkj vuøfer fd;k x;k rFkk mUg ,ulhvkbch
thucd e lLrr fd;k x;kA bl d vfrfjDr ; Ng
thu ykl rFkk f'kd kj okgdk e mi Dyku fd, x,
rkfd ;hLV i.kkyh e chchvkj,eoh d ohith d l kFk
bu thuk dh iR;{k vrjfØ;k dk v/;;u fd;k tk
ldA iorh; dy e chciVhoñ l Øked pØ d v/
;;u d fy, l Øfer ifÜk;k d Årdk l fofHkUu
vrjkyk ij ,d= fd, x, ikVhu dk foyfxr fd;k
x;k rFkk bul lcf/kr ikfV;kfed v/;;u fd, tk
jg gA

ik|kfxdh gLrkrj.k

Hkkjr rFkk fon'k l vk, 4500 fd lkuk] oKkfudkj
jkT; df" ,o cxxokuh vf/kdfj;k] fofHkUu m|fe;k]
Nk=k rFkk vU; fgr/kkjdk u Hkk-d-v-i-&jk"Vh; dyk
vul/kku dUn dk nkjk fd;k rFkk ;gk d oKkfudk
rFkk rduhdh LVkQ d l kFk ppk djr g, dy dh
[krh ij viu Kku dk vknku&inku fd;k rFkk bl
dUn e fodflr fofHkUu ik|kfxdh;k d ckj e u
doy mUg crk;k x;k cfYd mud lc/k e if'kf{kr
Hkh fd;k x;kA vkB jfM;k okrk,] pkj njn'ku okrk,
rFkk fofHkUu nfud lekpkj&i=k o if=dvk e 25
i l fvlif.k;k Hkk-d-v-i-&jk"Vh; dyk vul/kku dUn
{kjk idkf'kr dh xBA lLFkku u jkT;@jk"Vh; Lrj
dh 13 in'kfu;k e Hkkx fy;k@mkudk vk;k tu fd;k
rFkk dy 9 ifj l j e rFkk 5 ifj l j l brj if'k{k.k
dk;Øe pyk, x, tk fd lkuk vkj m|fe;k d fy,
gA o" d nkjku bl dUn e n l
l feukj@ l Eeyu@ l xkf"B;k@dk;'kkyk,@cBd
vk;kftr gbA Hkk-d-v-i-&jk"Vh; dyk vul/kku dUn

d oKkfudk u {k=h;@jk"Vh;@vrjjk"Vh; Lrjk d
dy 48 l feukj@ l Eeyu@ l xkf"B;k@dk;'kkykvk@
cBdk e Hkkx fy;kA lL;kÜkj l kt&l Hkky] idftx
rFkk HkMkj.k vkfn ij ik|kfxdh;k 49 m|fe;k dk
gLrkrfjr dh xBA okf.kfT;d fdLe m|e d dy
5950 dy d ik/k rfey ukM rFkk vU; jkT;k d
fofHkUu ftyk d dyk mxku oky fd lkuk d chp ckV
x,A

lEid ,o lg;kx

Hkk-d-v-i-&jk"Vh; dyk vul/kku dUn d
vrjjk"Vh; lLFkkuk d l kFk vul/kku lg;kx lc/kh
dk;Øe py jg gA bu lLFkkuk e 'kkfey g %
vkbvkbVh,] ukbt hfj;k(ck;kof lVh bvju'kuy] Ý l(
d; ,y] cfYt;e vkj Doh l yM fo'ofok|ky;]
vklVfy;kA bl lLFkku d jk"Vh; lLFkkuk uker%
ckd] eEcb(foKku ,o ik|kfxdh fofHkx rFkk
toik|kfxdh fofHkx] ub fnYyh(,ihMk(rfey ukM
df" fo'ofok|ky;] dk;EcÜkj(,uvkbVh] fr : fPpkiYyh
rFkk d,ulhbVh] FkktVV;ke] rfey ukM d l kFk Hkh
lEid lFkkfir gA bl dUn d Hkk-d-v-i- d vU;
lLFkkuk t l Hkk-d-v-i-&,uchithvkj] ub fnYyh(
Hkk-d-v-i-&vkbvkb,pvkj] cxy: vkj Hkk-d-v-i-
&l hvkb,b %k=h; dUn% dk;EcÜkj d l kFk Hkh lEid
cu g, gA MhchVh&,ubvkj d vrxr n'k d fofHkUu
ckxk e fLFkr 50 l vf/kd lLFkkuk dk Hkk-d-v-i-
&jk"Vh; dyk vul/kku dUn d l kFk lEc) fd;k tk
jgk gA ;g dUn Hkk-d-v-i-&,vkb l hvkj ih %Qy% d
dUnk %dy l [;k 11% d l kFk Hkh lElo;u dj jgk gA
; dUn dy ij dk; dj jg gA dy d cM ieku ij
io/ku e 'kkfey Ård lo/ku m|kx] fd lkuk fu;krd]
jkT; cxxokuh vkj df" fofHkx rFkk Lo; lg;k;rk
legk dk Hkh fofHkUu vul/kku ,o fodk l kRed xfrfof/
k;k d fy, dUn d l kFk tkMk x;k gA

ekuo l lk/ku fodk l vkj f'k{k

ekuo l lk/ku fodk l d vrxr Hkk-d-v-i-&jk"Vh;
dyk vul/kku dUn d pkj oKkfud] vkB rduhdh]



nk i'kk Ifud vkj rhu l gk;h dfe;k u fofHkUu if'k{k.k
dk;Øe e Hkx fy;k g rFkik viudk;'khy Kku dk
v|ru fd;k gA dUn }kjk vrjjk"Vh; rFkk jk"Vh;
Lrj d ifrf"Br fofHkUu tuyk e 12 vul/kku i=
idkf'kr g, g rFkk fofHkUu lEeyuk@lxkf"B;k@
lfeukj vkfn e 25 vul/kku i= iLrr fd, gA ;
dk;Øe ij n'k e vk;kftr g, gA fofHkUu
fo'ofok|ky;k e ch-Vd] ,e-Vd] ,e-, l l h- vkj ih,p-

Mh- mikf/k;k d fy, v/;;ujr Nk=k dk dUn d
oKkfudk u dy ij 'kk/k ic/k lc/kh dk; d fy,
ekxn'ku fd;k g rFkk rhu Nk=k u Hkjjrhnl
fo'ofok|ky;] f=ph l MkDVjV dh mikf/k iklr dh gA

jktLo l tu

dUn }kjk foUk o"k 2017&18 d nkjku dy
81]85]962@&#- dh jkf'k lft r dh xba

4. vu l/kku miyfc/k;k

4.1 QIy l/kk

4-1-1 Hkkjr; miegk}hi e dy d vkuof'kd
l l/kuk dk l/kkj vkj ic/k

ldyu

ikFkfed lkr

Hkkjr d mUkj ioh {k=k ftue vle} v#.kkpy
in'k ukxkyM vkj ef.kij 'kkfey g] dk lo{k.k fd;k
x;k rFkk E; l k ukxf l ;e] ,e- flfDdef l l] ,e-
bfVuj l] ,e-ph lekuh vkj E; l k dh 'kkHkkdkjh i tkfr;k
t l ,e- vkjfv;kd] ,e- oyfvuk vkj ,e- oyfvuk d
ofj;V l fgr E; l k dh 15 ifof'V;k l dfyr dh xb
% l kj.kh 1 vkj fp= 1%A

f}rh;d lkr

dyk vu l/kku dUn] duukj] djj %7% l ye %1%
dU;kdekjh %1% vkj rfey ukM dh vUukey; igkfM;k
%2% vle df'k fo'fo|ky;] t kjgV] vle %10% rFkk
ckxokuh foKku fo'fo|ky;] ckxydkV] dukVd %8%
l kj.kh 1 % ikFkfed lkrk l iklr ldyuk dh lph

l dy 29 ifof'V;k ,d= dh xb g rFkk mUg thu
cd e 'kkfey fd;k x;k g % l kj.kh 2%A



fp= 1 % E; l k ukxf l ;e& v#.kkpy in'k d pkxykx fty
l igyh ckj ,d= dh xba %a% LoHkko(%b% uj i"i dfyd(%c%
Qy dk yEcor dkV

ifjp;

dy 73 fon'kh ifof'V;k dk Hkk-d-v-i-
&,uchih thvkj] ub fnYyh d ek;/e l nk cp e
vkbVh l h] cfYt;e l ykdj ;gk mxk;k x;kA bue
l 19 ifof'V;k dk iutuu gk pdk g rFkk mUg [kr
e jkik x;k g vkj 'k'k ifof'V;k iutue dh fofHkUu
voLFkvvk e g % l kj.kh 3%A

Ø- l-	ifof'V dk uke	vuHkkx	jkT;
1-	E; l k flfDdef l l idkj i	b;ek l k	v#.kkpy in'k
2-	E; l k ukxf l ;e idkj i	b;ek l k	&ogh&
3-	E; l k bfVujk l idkj i	b;ek l k	&ogh&
4-	E; l k ukxf l ;e idkj i	b;ek l k	&ogh&
5-	E; l k bfVujk l idkj ii	b;ek l k	&ogh&
6-	E; l k bfVujk l idkj iii	b;ek l k	ukxkyM
7-	[k l kx oU; idkj	b;ek l k	&ogh&
8-	E; l k bfVujk l idkj iv	b;ek l k	&ogh&
9-	E; l k jk t l hb	jkMkDyeb l	&ogh&
10-	E; l k oyfvuk ofj;V i	jkMkDyeb l	&ogh&
11-	E; l k vkjfv;kd	jkMkDyeb l	&ogh&
12-	E; l k oyfvuk ofj;V ii	jkMkDyeb l	&ogh&
13-	E; l k flfDdef l l idkj ii	b;ek l k	&ogh&
14-	E; l k ph lekuh	b;ek l k	ef.kij
15-	E; l k vkdj l h	b;ek l k	&ogh&



lkj.kh 2 % f}rh;d lkrk l iklr ldyuk dh lph

dUn	ldyu
chvkj, l] dUukj] djj	fi l kx en] ikdk] lx Fkh] ih, 03&22] ihoh 03&44] fi l kx efyd] Vh,ech&15108&6
, , , ;] tkjgV] vle	Hkhedky] vfFk; kdky] gkMk] tkfrdky] eukgj] fnxtkok] vk l kel ekyHkkx] eutkgth] y l kjh eukgj] Q l k eukgj
ekFkUme] dU; kdekjh] rfey ukM	E; / k f l ; keh
'kjojk; igkfM; k] lye] rfey ukM	y kMu
vUukey; igkfM; k] i k Y Y k k p h] rfey ukM	, e- , D; feuV k tkfr; k cekfudk] , l V l i j c e
; , p, l] ckxydkV] dukVd	j k t k i j h] l D d k j c y] d k j h c y] c n f e f v d k] c k x h c y] c n c y] ' k k u c y] f e r y h

lkj.kh 3% o"k 2017&18 d nkjku vkbVh l h] cfyt; e l ykb xb ifof"V; k dh lph

Ø- l-	vkbVh l h l-	ifof"V dk uke	thuke	xf.krk
1-	vkbVh l h 0005	xbuvk	AAA	3x
2-	vkbVh l h 0063	fi l kx rkxkV	AA	2x
3-	vkbVh l h 0090	R t k m y x k n k	AA	2x
4-	vkbVh l h 0094	cYchf l ; kuk %10852%	BB	2x
5-	vkbVh l h 0180	xkM u; u	AAA	3x
6-	vkbVh l h 0200	dykx efdV	AAB	3x
7-	vkbVh l h 0217	vDikdikd	AAB	3x
8-	vkbVh l h 0258	fi l kx en	AA	2x
9-	vkbVh l h 0280	j k t k i j h b f M ; k	AAB	3x
10-	vkbVh l h 0319	fc; dfVi	AAA	3x
11-	vkbVh l h 0433	fi l kx efYyd	AA	2x
12-	vkbVh l h 0446	l ; & r y k c u	AA	2x
13-	vkbVh l h 0448	fi l kx dfyx	AAB	3x
14-	vkbVh l h 0471	ccd	AA	2x
15-	vkbVh l h 0530	, 3617	AA	2x
16-	vkbVh l h 0727	Qkx	AA	2x
17-	vkbVh l h 1067	Vh, p, 018	AA	2x
18-	vkbVh l h 1287	fi l kx cjkxu	AAA	3x
19-	vkbVh l h 1520	E; / k , D; feuV k %11@9&02%	AA	2x

vkdf r&oxh d j . k f o K k u h y { k . k & o . k u

rhu l kck vk/kkfjr l d j l r f r ; k] fi l kx t k t h x ekVv h % fi l kx t k t h x y j k o d %] i R ; d d h , d & , d

l r f r d f y , v k d f r & o x h d j . k f o K k u h y { k . k & o . k u d k d k ; i j k g k p d k g A 11 n l h i f o f " V ; k r F k k p k j v k b V h l h i f o f " V ; k d k m u d t h u k e h r F k k m i & l e g k d l n H k e i g p k u d k d k ; f d ; k x ; k g % l k j . k h 4 % A

lkj.kh 4% o" 2017&18 d nkjku vkdfv oxhdj.kfoKkuh Lrj ij y{k.k of.kr ifof"V;k dh lph

Ø-I-	ifof"V I-	ifof"V dk uke	fu/kkfjr thuke	fu/kkfjr mi leg
1-	2428	dnyh	AA	; uhd
2-	2457	mffkju	AAB	ike
3-	2458	nxk	AAA	eukj thre
4-	2459	eFkj kxk	ABB	ekFkku
5-	2447	vfEc; kekj	AAA	dofM'k
6-	2449	eFkyh	ABB	ikxj cukuk
7-	2472	th&9 MokQ	AAA	dofM'k
8-	2450	gueku	AAA	ver l xj
9-	2434	pEik xkV	AAB	; uhd
10-	2443	tgk th E; VV	AAA	dofM'k
11-	2446	ipdnyh	AAB	; uhd
12-	vk bVh l h 0005	xbuvk	AAA	; uhd
13-	vk bVh l h 0279	ckb; kx	AA	lyVu
14-	vk bVh l h 1129	fcx ,ckxk	AAB	, Q, pi h
15-	vk bVh l h 0504	, Q, pvkb, 01	AAAB	ike
16-	l rfr l [; k 97	fi l kx tk th x ekVVh	AA	; uhd
17-	l rfr l [; k 148	fi l kx tk th x ybjk0d	AA	; uhd
18-	l rfr l [; k 690	lck x fi l kx fyfyu	ABB	Cyxk,
19-	l rfr l [; k 685	lck x fi l kx fyfyu	ABB	Cyxk,

ithdj.k

dy 81 vuk[k tuun0; dh ifof"V;k d ik l ikV vkdM Hkk-d-v-i- & ,uchih thvkj] ub fnYyh dk iLrr fd, x, g rFkk mUg 0623553 l 0623633 rd dh vkb l h l [; k, inku dh xb ga

okf.kfT; d fdLe m|e d ik/kk d fofHkUu Hkkxk l 0; RiUu Ård lof/kr dyk dk eY; kdu

ik/k d rhu fofHkUu Hkkxk uker% ijkg dh ukd]

dkeyV o uj i"i dfydkvk l 0; RiUu okf.kfT; d fdLe m|e dk ?kudnk dk ryuh; d : i e mi; kx djr g, efYy; keikFk fLFkr fd l kku d [kr e eY; kdu fd; k x; kA ifj.kkek l ; g ldr feyk fd i"i dfydk l 0; RiUu ik/kk l 373 fnuk e vkl ru 26 fd-xk- dh mit iklr gkrh g tcf d ryuh; d : i e ?kudnk l 391 fnuk e 20-3 fd-xk- dh gh mit iklr gkrh gA mit l lcf/kr l Hkh ikpy vEyrk d fy, mipkj d vfrfjDr mYy[kuh; : i l J"B ik, x, % lkj.kh 5 vkj fp= 2%A

lkj.kh 5 % okf.kfT; d fdLe m|e d ik/k d fofHkUu Hkkxk l 0; RiUu Ård lof/kr ik/kk d mit lcf/kr vkdM

Ø-I-	ik/k dk Hkkx	xPNi dk Hkkj	gM dh dy l-	ifr gM Qyka dh l [; k	Qyka dh dy l-	Q l y dh Vh, l, l vof/k	vEyrk
1-	?kudn	20-30	14-00	19-10	287-00	391-00	30-00
2-	ijkg dh ukd	19-00	13-20	18-10	208-40	433-00	29-10
3-	dkeyV	18-00	13-00	18-00	184-10	406-00	26-10
4-	uj dfydk	26-00	15-40	19-10	300-10	373-00	29-40



?kudn



ijkg dh ukd



uj i"i dfydk



dkeyV

fp= 2- okf.kfT;d fdLe m|e d ik/k d fofHkuu Hkxk I 0;RiUu Ård lo/ku ik/kk d xPN

iki.k llexh dh vkifr

okf.kfT;d fdLek j lFkyh rFkk lcyh iR;d d 50&50 Ård lof/kr ik/k [kr eY;kdu d fy, f=ijk fo'fo|ky; dk vkir fd, x, A okf.kfT;d fdLe j lFkyh d ldmk Ård lof/kr ik/k ¶; tfj;e e>ku jkx dkey;kdu dju d fy, vle df" fo'fo|ky;] tkjgV dk vkir fd, x, gA jkxDr LoLFk ?kudnk dh 44 ifof"V;k MlyhdV e Loik= l j{k.k d fy, Hkk-d-v-i-&,uchihthvkj dk vkir fd, x, gA tuun0; d jkxDr LoLFk ?kudn ;, l vjkhkhoh(cxxokuh foHkx] cLrh ¼mÜkj in'k½(rfey ukM df" fo'fo|ky;] dk;EcÜkj(Hkk-d-v-i-&vkj lhbvkj] {k=h; dUn] jkph(df" foKku dUn] vfj;kyj vkj ,Qvkj, l oxyk dk eY;kdu d mnn'; l forfjr fd, x, gA okf.kfT;d fdLe m|e d Ård lof/kr yxHkx 5949 ik/k e l l 'kkfr ,xkVd cxy: d ek/;e l fd l kuk d cip forfjr fd, x,

gA okf.kfT;d fdLe m|e d ik/k d ijkg ukd l mRiUu yxHkx 250 ik/k cM ieku ij ix.ku d mnn'; l e l l ,xkVd] cxy: dk vkir fd, x, gA m|e rFkk xkM u;u fdLek d ik"kd lo/ku e l l vj.; ,xh ck; kVd] xtjkr dk vkir fd, x, gA

¶; tfj;e e>ku ¼, Qvk/ h½ t kfr 1 vkj t kfr 4 d fo#) ifrjk d fy, tuun0; ifof"V;k d jkxxLr lykV dh NVkb

dy 311 ifof"V;k l ;Dr ØKM l dyu dk eFkykijel Fkuh ftyk] rfey ukM e ¶; tfj;e e>ku t kfr 1 ¼Fkuh ,Qvk/ h oh l h th 0124½ d fo#) NVkb d fy, nk ikoLFkvvk e jkxxLr lykV e jkik x;k gA dy 231 ifof"V;k d igy cp d fy, jkx d ieku ¼0&5½ ij vkrfjd Ldkfjx dk dk; ijk dj fy;k x;k gA ikFked ifj.kkek l ;g l dr feyk fd rhu AA f}xf.kr] nk ,e- cYch/ l ;kuk idkj] nk dofM'k Dyku]

lkr elj idkj] ikp ike idkj rFkk iR;d ,d&,d ;uhd rFkk l dj ifof"V;k ¶; tfj;e e>ku jkx dh ifrjk/kh ikb xb gA

Hkk-d-v-i-&,uvkj l hch e LFkkuh; ryuh;k d l kFk ,uvkj l hch p;u 6 vkj 7 dk eY;kdu

Hkk-d-v-i-&,uvkj l hch p;u 6 vkj 7 d fu"iknu dk eY;kdu LFkkuh; ryuh; d : i e LFkkuh; fdLek ekFku o vnDd ekFku d l kFk Hkk-d-v-i-&jk"Vh; dyk vu l/kku dUn d Qke ij fd;k x;kA ifj.kkek l ;g l dr feyk fd p;u 6 Qly dh vof/k] xPNk

d Hkkj] gM dh l ;k] ifr gM Qyk dh l ;k vkfn d lnHk e LFkkuh; ryuh; d cjkck Fkka p;u 7 dk Qly dh vof/k rFkk xPN d Hkkj d lnHk e LFkkuh; ryuh; fdLe dh vi{kk J"B ik;k x;k ;k l k] .kh 6% A

rfey ukM d enkuk rFkk iorh; {k=k e ,uvkj l hch p;u 11 dk eY;kdu

Hkk-d-v-i-&jk"Vh; dyk vu l/kku dUn p;u 11 %eukjft re ofj;V½ dk eY;kdu enkuk rFkk iorh; {k=k e fd;k x;kA ifj.kkek l ;g inf'kr gvk fd dy d mPprj Hkkj %18-5&22-5 fd-xk-% rFkk ik/k dh

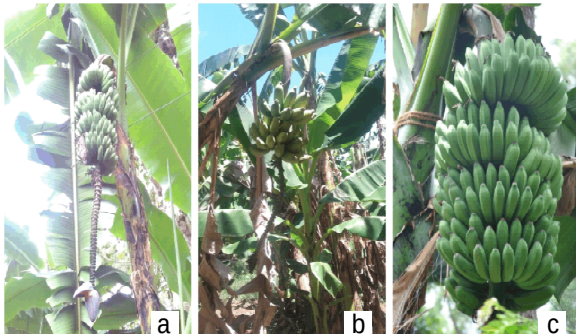
l k] .kh 6- Hkk-d-v-i-&jk"Vh; dyk vu l/kku dUn] fr : fPpjkiYyh e l cf/kr LFkkuh; ryuh; fdLek d l kFk ,uvkj l hch p;u 6 vkj 7 dk eY;kdu

x.k	,uvkj l hch LFkkuh; ryuh; p;u 6	%ekFku½	LFkkuh; p;u 7	LFkkuh; ryuh; %vnDd ekFku½
Åpkb % l -eh-%	366-8	367-0	356-8	360-5
ekVkb % l -eh-%	80-4	82-2	85-1	82-5
i"iu e fy, x, fnu	315-0	318-0	295-0	302-0
Qy dh ifjiDork e yxu oky fnu	116-0	113-6	115-0	120-5
vof/k %fnuk e½	431-2	431-6	410-0	422-5
xPN dk Hkkj %fd-xk- e½	21-7	21-4	20-8	19-0
gM dh l ;k	6-8	6-2	8-6	9-0
ifr gM Qyk dh l ;k	13-0	12-2	12-5	12-0
Qyk dh dy l ;k	93-0	79-2	111-5	118-0

l k] .kh 7- ,uvkj l hch p;u 11 d of) ,o mit ikpyk d ryukRed vkdM

x.k	Hkk-d-v-i-&,uvkj l hch] fr : fPpjkiYyh %enku½	dkYyh igkfM;k %lenry l 1350 ehVj dh Åpkb½	iyuh igkfM;k %lenry l 1500 ehVj dh Åpkb½
Åpkb % l -eh-%	3-5	4-5	4-3
ekVkb % l -eh-%	75-0	98-0	86-0
i"iu e fy, x, fnu	240-5	295-0	299-0
Qy dh ifjiDork e yxu oky fnu	105-0	120-5	119
vof/k %fnuk e½	355	415	410
xPN dk Hkkj %fd-xk- e½	8-0	22-5	18-5
gM dh l ;k	8	9-0	9-0
ifr gM Qyk dh l ;k	15	18	16-0
Qyk dh dy l ;k	120	162	144

Åpkb ¼4-3&4-5 eh-½ d lnHk e Åpkb oky LFkkuk ij budk fu"iknu cgrj FkkA rFkkfij enkuk e 8 fd-xk-xPN d Hkkj] 3-5 eh- Åpkb rFkk 355 fnuk dh Qly vof/k ¼lkj.kh 7½ d foiijr bldh Qly dh vof/k ych ¼410&415 fnu½ FkhA bld Qy vR;f/kd lxf/kr Fk rFkk bUg 'khr HkMkj xg e 130 l- ij Hkh l jf{kr j [kk x;k ¼fp= 3½A



fp= 3- ,uvkj lhch p;u 11 ifjiDo voLFkk ij a) iyuh igkfM;k] b) Hkk-d-v-i-&,uvkj lhch] fr : fPpjkiYyh] c) dkYyh igkfM;k

t kbV dfofM'k d cku mRifjordk dk eY;kdu ¼ckd] eEcb½ d lg;kx e

ryuh; rFkk ,d mRifjord o'kØe Vhch,e&9 l fgr t kbV dfofM'k d vkb mRifjord o'kØe ckd eEcb l iklr fd, x,A ?kudnk dk Hkk-d-v-i-&,uvkj lhch] fr : fPpjkiYyh] rfey ukM e jkik x;k rFkk Ård lof/kr ik/kk dk efYy;eikFk] fr : fPpjkiYyh] rfey ukM e fd lkuk d [krk e jkik



fp= 4a. ckd] eEcb l ykdj Hkk-d-v-i-&,uvkj lhch Qkej fr : fPpjkiYyh e jkik x, cku mRifjord o'kØe



fp= 4b. efYy;keikFk] fr : fPpjkiYyh e fd lkuk d [kr e jkik x, Vhch,e 9 d [kr dk ,d n';



fp= 4c. 29 fd-xk- xPN d Hkkj okyk Vhch,e&9 x;kA mRifjord o'kØe Vhch,e 9 u 26-8 fd-xk- dh 302-4 fnuk dh Qly vof/k d nkjku vklr mit nr g, fd lkuk d [krk e cgrj fu"iknu fn;kA bl fdLe d ik/kk dh Åpkb Hkh 1-69 ehVj Fkh tk ryuh; dh vi{kk de Fkh ¼fp= 4a, 4b vkj 4c½A

,uvkj lhch p;u 8 vkj 9 dk vx ifDr in'ku

df'k foKku dUn] ukxjdkbu d ek/;e l fd lkuk d [krk e vx ifDr in'ku fd;k x;kA ,uvkj lhch ifofV;k 8 vkj 9 dk eY;kdu ryuh; d : i e Øe'k LFkkuh; ekFku rFkk ukM d lkFk fd;k x;kA ifj.kkek l ;g ldr feyk fd p;u 8 Qly dh vof/

k rFkk mit d lnhk e LFkkuh; ryuh; fdLe d
cjkcj FkkA rFkfi] gM dh I [;k rFkk Qyk dh dy
I [;k p;u e mPprj FkhA p;u 9 d ekey e ; |fi



fp= 5- ,uvkj l hch p;u 8 vkj 9 dk vx ifDr in'ku

lkj.kh 8- dU; kdekjh fty] rfey ukM d ukxjdkby e i{k= in'ku e LFkkuh; ryuh; fdLe dh vi{kk ,uvkj l hch p;u
8 vkj 9 d of) rFkk okuLifrd ikpy

x.k	,uvkj l hch p;u 8	LFkkuh; ryuh; %ekfku%	,uvkj l hch p;u 9	LFkkuh; ryuh; %ukM%
Åpkb %l-eh-%	378-4	367-0	371-5	320-0
ekVkb %l-eh-%	78-0	82-2	85-1	68-0
i"iu e fy, x, fnu	314-6	318-0	294-0	280-0
Qy dh ifjiDork e yxu oky fnu	113-2	113-6	107-8	110-0
vof/k %fnuk e%	427	431-6	401-8	390-0
xPN dk Hkkj %fd-xk- e%	22-9	21-4	23-5	15-5
gM dh I [;k	9-0	6-2	8-5	7-5
ifr gM Qyk dh I [;k	13-4	12-2	12-8	12-0
Qyk dh dy I [;k	123-2	79-2	113	92-0

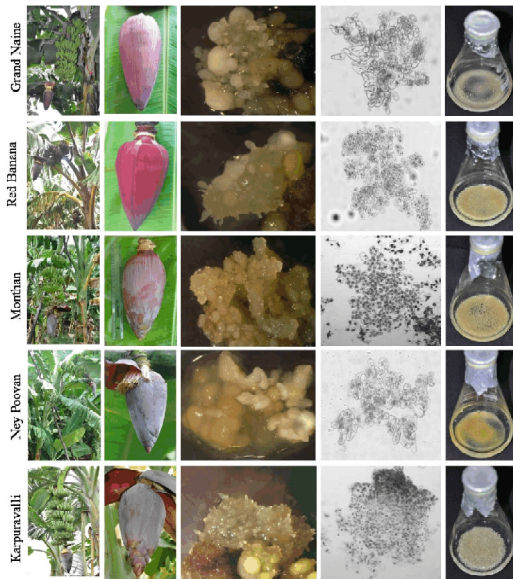
lkj.kh 9- Hkk-d-v-i-&,uvkj l hch p;uk dk ,Qvk/h d fo#) jkx Ldkj

Ø-I-	fdLe	thuke	vk l r jkx Ldkj
1-	,uvkj l hch p;u 11	AAA	0-0
2-	ikpk ckFkk cFkh l k	ABB	3-3
3-	vk'kh cFkh l k	ABB	4-0
4-	,uvkj l hch p;u 7	ABB	3-0
5-	,uvkj l hch p;u 6	ABB	4-3
6-	cl k	ABB	3-0
7-	U;Vikx	ABB	3-0
8-	ikikmykm	AAB	2-0



dy dh okf.kfT;d fdLek e dkf;d Hk.ktuu dh LFkkiuk

dy dh ikp okf.kfT;d fdLek uker% u; iou %AA% jM cukuk %AAA% Icjh %AAB% ekFkku %ABB% vkj djijoYyh %ABB% d Hkfe tfur dyl IQyrkiold fodflr fd, x, %fp= 6%A



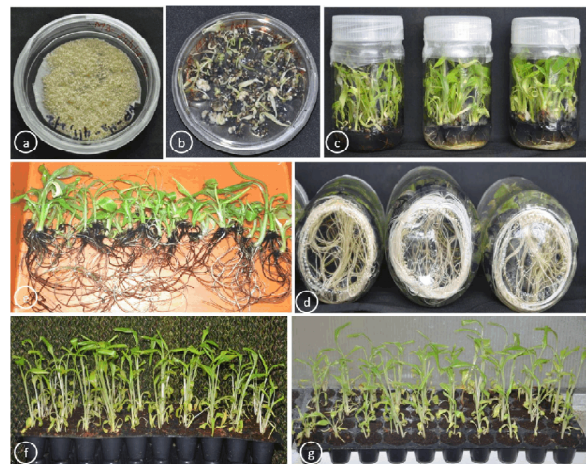
fp= 6- fofHkUu okf.kfT;d fdLek I LFkkfir blh, I

fofHkUu fdLek I iklr Hk.k tuu dkf'kdk fuycu %blh, I % dk iutuu vkj vdj.k n{krk

1 fe-fy- fLFkj g, dkf'kdk vk; ru %, I I hoh% I 4000 dkf;d Hk.k I mRiUu rhu fdLek uker% u;



fp= 7A- jM cukuk blh, I



fp= 7B- u; iou %,u,u,QchVh5% blh, I a) blh, I I iutfur dkf;d Hk.k] b) dkf;d Hk.kk I vdfjr ik/k] c) ijkg ;Dr ik/k] d) tM ;Dr ik/k] e) dBkj cuk, x, ik/k] f) vkj g) ikFkfed dBkj voLFkk oky ik/k

iou] jM cukuk vkj Icjh d blh, I dk dkf;d Hk.k tuu ikVkdKy ekudhr fd;k x;k gA okf.kfT;d fdLek jM cukuk %dkf'kdk o'kØe & ,uvkjch,Qch Vh13% vkj Icjh %dkf'kdk o'kØe & ,u, I ,Qch Vh2% d blh, I I 1 fe-fy- , I I hoh d ek/e I Øe'k 5600 vkj 5950 dkf;d Hk.k mRiUu g, %fp= 7A vkj B%A

okf.kfT;d fdLe u; iou e : ikrfjr vdfjr ek/e e dkf;d Hk.kk dk yxHkx 80 ifr'kr vdj.k n[kk x;kA jM cukuk d blh, I 0; RiUu ik/kk d tM rFkk ijkg dh yckb;k Øe'k 14 I-eh- vkj 8 I-eh- FkhA

dy d ik/k d Hkxk I mRiknu dk mUu;u djuk

ck;kfj,DVj dk mi;kx djd Hk.k tfur dkf'kdk fuycu lo/ku I cM ieku ij ik/kk d Hkxk ;k NKV ik/kk dk r;kj dju dk dk; dy dh fofHkUu fdLek uker% xkM u;u] j I Fkyh vkj Icjh e fd;k x;kA okf.kfT;d fdLe xkM u;u d ,d fe-fy- Hk.k tfur dkf'kdk fuycu I 45]000 mi ik/k mRiUu g, tcf d j I Fkyh d 12]000 mi ik/k mRiUu g, %fp= 8%A



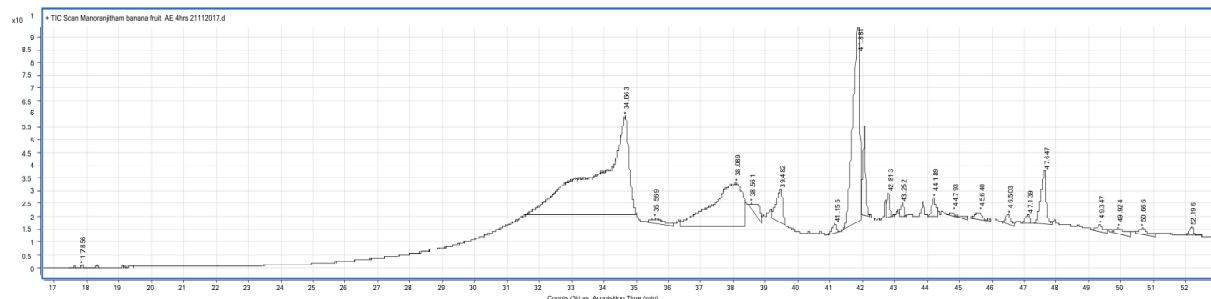
fp= 8- dy d mi ik/kk dk mPp&FkiV cM ieku ij mRiknu] %a% ifjiDo dKf; d Hk.k] %b% vdfjr mi ik/k] %c% mi ik/kk dk fodkl] %d% ikFkfed Lrj ij dBkj cuk, x, ik/k] %e% ik/kk dk f}rh; d dBkjhdj.k

'kkHkkdkjh dy d tuun0; dk j[kj[kko

dy dh 'kkHkkdkjh i tkfr; k t l E; l k yVfjVkj ,e- vkukVkj ,e- fl ;kef l l] ,e- :ck] ,e- oyVhuk] ,e- oyVhuk vrj vuHkkxh; l dj] ,e- cDdkjh] ,e- vkjfv; kdk] ,e- dkdDhuh rFkk ,U l V Xykmde dk Hkk- d-v-i-&jk"Vh; dyk vul/kku dUn d Qke ij j[kj[kko fd; k tk jgk gA

'kkHkkdkjh dy d l dj k dk fodkl

fofHkUu 'kkHkkdkjh i tkfr; k t l ,e- yVfj; k] ,e- vkukVkj ,e- :ck] ,e- oyVhuk rFkk ,e- fl ;kef l l d fofHkUu l dj l ; kxk dk 'kkfey djr g, l djhdj.k d i; k l fd, x, A dy feyk dj id g, xPNk l 575 l dj cht fudky x, A bue l doy 34 ifr'kr cht k e Hk.k Fk vkj ; iutuu dh fofHkUu voLFkkvk e gA bl idkj d dy dh 112 l dj l rfr; k f}rh; d dBkjhdj.k dh voLFkk e g ftue ,e- oyVhuk dh 95 [kyh ij kfxr l rfr; k Hkh 'kkfey gA



fp= 9- eukjftre dy d Qy dk ,p,l,l&thl,h,e,l ØkeVxke

okf.kfT; d fdLe eukjftre l Qy d ok'i'khy ; kfxdk dh igpku

okf.kfT; d fdLe eukjftre d Qyk l dy 21 ok'i'khy ; kfxdk dh igpku dh xb gA bu 21 ; kfxdk e l pkj ok'i'khy ; kfxdk ukerh vkD l k kbDykgD l kMdku&2&ou %1-13 ifr'kr% 2&feFkkbyC; Vukuk, V %0-95% vkj gD l kfud vEy glV kMdkby ; hLVj %0-49% u dy dh l x/k e vkHk l h : i l ; kxnu fn; k g %fp= 9% tcf d vU; dyk e l x/k d fy, mÜkjnk; h ok'i'khy ?kVdk dh igpku th l h, e, l fo'y" k. k d }kj k dh xb vkj bue b&2&gD l uky] fyekuu rFkk ,; xuky 'kkfey gA

4-1-2 ij ijkxr ituu d ek; e l dy dk l / kkj

fl xkVkd k iÜkh /kCck %ekbdkLQh jyk ,; E; l h% dk fodkl

fl xkVkd k iÜkh /kCck d ifr lonu'khy okf.kfT; d fdLe iou dk dydÜkk 4] fi l kx fyfuU okf.kfT; d fdLe jk t] , l ,p&3436&9 vkj E; l /kekbØkd k i k d l kFk l djhdj.k dkj; k x; kA iou d dy 314 gM dk l djhdj.k dkj; k x; k ft l d ifj.kkeLo: i 478 l dj cht i k l r g, %iou x dydÜkk 4 & 354 cht(iou x fi l kx fyfuU&110 cht(vkj iou x okf.kfT; d fdLe jk t &4 cht %A ; | fi cht yxu rFkk thou'khy Hk.kk dk ifr'kr ,e- ekbØkd k i k vkj dydÜkk 4 d l kFk iou dk l dj djku ij l okf/kd Fkk] rFk k fi



bue l dkb cht vdfjr ugh gvkA ifr gM l okf/ kd cht fi l kx fyfyu e fjdkM fd, x, $\frac{1}{4}$ ifr gM 2-3 cht $\frac{1}{2}$ A bld i'pkr Øe'k $\frac{1}{2}$ dydÜkk 4 $\frac{1}{4}$ ifr gM 1-5 cht $\frac{1}{2}$ rFkk okf.kfT; d fdLe jkt $\frac{1}{4}$ ifr gM 0-12 cht $\frac{1}{2}$ dk LFkku FkkA dy 478 cht k e l 119 Hk.k $\frac{1}{2}$ 24-1 ifr'kr $\frac{1}{2}$ iklr fd, x, rFkk mudk Loik= lo/ku fd; k x; kA

dy e cht yxu dh nj dk c<ku ij v/; ; u

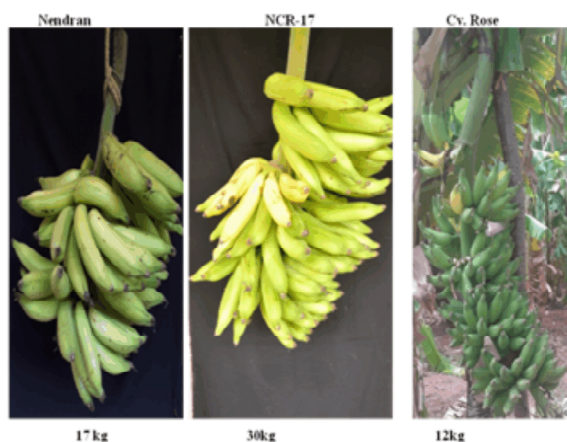
chtk dh l [; k c<ku d fy, ij kx.k dh fofHkUu rduhd t l ryuh; $\frac{1}{4}$, dy ij kx.k $\frac{1}{2}$ ikbfu; j ij kx rduhd $\frac{1}{4}$ ngjk ij kx.k $\frac{1}{2}$ vkj l Økt 5 ifr'kr \$ ckfjd vEy 100 ihih, e d l kFk ij kx.k viukb xBA ifj.kkek l ; g l dr feyk fd okf.kfT; d fdLe iou e ik; fu; j ij kx.k vkj j l k; uk dk mi; kx dju l ifr gM cht k e 0-44 cht rFkk ifr gM 3-43 cht k dh of) gbA bl fof/k e uj tud d : i e fi l kx fyfyu dk mi; kx fd; k x; kA bl h idkj] uj tud d : i e okf.kfT; d fdLe jkt dk mi; kx djr g, ik; fu; j ij kx.k vkj j l k; uk dk bLreky dju ij cht k d yxu e Øe'k $\frac{1}{2}$ ifr gM 0-1 cht rFkk ifr gM 0-14 vkj 0-25 cht k dh of) gbA dydÜkki 4 d ekey e fofHkUu ij kx.k fof/k; k dk i; k l fd; k x; k yfdu fd l h e Hkh dkb mYy[kuh; mÜkj ugh ik; k x; kA

okf.kfT; d fdLe uUnu e tM e ?kko dju oky l=dfe $\frac{1}{4}$ ifvYd l dk Qhb $\frac{1}{2}$ d fo#) ifrjk/k dk fodk l

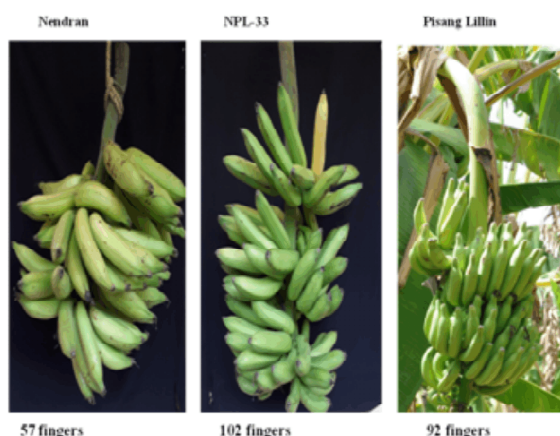
ikoLFk l uUnu vk/kkfjr l rfr; k d eY; kdu l ; g Li"V gvk fd l rfr; k , ul hvkj 17] , ul hvkj 18] , ul hvkj 2 vkj , uvkih 43 l mud tudk dh ryuk e mPprj mit $\frac{1}{4}$ > 15 fd-xk- $\frac{1}{2}$ fjdkM dh xBA pkj l rfr; k uker $\frac{1}{2}$, ul hvkj 17 $\frac{1}{4}$ 40% $\frac{1}{2}$ $\frac{1}{4}$ fp= 10%] , ul hvkj 2 $\frac{1}{4}$ 30.6% $\frac{1}{2}$, ul hvkj 18 $\frac{1}{4}$ 30.6% $\frac{1}{2}$ vkj , uvkih 43 $\frac{1}{4}$ 21.3% $\frac{1}{2}$ l eknk tud uUnu dh ryuk e 20% mPprj mit fjdkM dh xBA uj tud d : i e okf.kfT; d

fdLe jkt ; k fi l kx fyfyu dk 'kkfey djr g, eknk tud uUnu dh ryuk e ifr xPNk vf/kd l [; k e dy mRiUu g, $\frac{1}{4}$, ul hvkj 19 dk NkMdj $\frac{1}{2}$ A l rfr , uih, y 33 e mud tudk $\frac{1}{4}$ fp= 10b $\frac{1}{2}$ dh ryuk e dyk dh vf/kd l [; k $\frac{1}{4}$ 102% $\frac{1}{2}$ fjdkM dh xBA pkj l rfr; k uker $\frac{1}{2}$, ul hvkj 28] , ul hvkj 30] , uih, y 36 vkj , uvkih 45 e mud eknk tud uUnu $\frac{1}{2}$ 2-97% dh ryuk e xn vkj fNy d dk vuikr mYy[kuh; : i l fuEu Fkk tcf d xn vkj fNy d dk 5 vuikr , uvkih 46 e fjdkM fd; k x; kA Qy dh l okf/kd yckb , ul hvkj 2 e fjdkM dh xb $\frac{1}{4}$ 29 l-eh- $\frac{1}{2}$ A bld i'pkr bl ekey e , uvkj l h 21 $\frac{1}{4}$ 28 l-eh- $\frac{1}{2}$ dk LFkku Fkk tk bld eknk tud dh ryuk e vf/kd Fkk $\frac{1}{4}$ 26 l-eh- $\frac{1}{2}$ tcf d , ul hvkj 12] , ul hvkj 19 vkj , uvkih 47 $\frac{1}{4}$ 16% $\frac{1}{2}$ dk NkMdj l Hkh l dj k e okf.kfT; d fdLe uUnu $\frac{1}{4}$ 16 l-eh- $\frac{1}{2}$ dh ryuk e Qy dh de ekVkb fjdkM dh xBA

l=dfe ifrjk/kh uUnu l rfr; k $\frac{1}{4}$ ikoLFk l $\frac{1}{2}$ d fodk l d fy, okf.kfT; d fdLe uUnu dk fofHkUu uj tudk uker $\frac{1}{2}$ dydÜkk 4] , e- ekbØk d k i k] fi l kx tk th vkj , l, p 3436&9 d l kFk l djhdj.k dj k; k x; k rFkk l okf/kd cht l [; k $\frac{1}{4}$ 211% $\frac{1}{2}$ vkj Hk.k l [; k $\frac{1}{4}$ 31% $\frac{1}{2}$ uUnu x dydÜkk 4 d l djhdj.k l iklr gb] tcf d l dj l ; k x uker $\frac{1}{2}$ uUnu x okf.kfT; d fdLe jkt rFkk uUnu x fi l kx tk th l doy nk Hk.k gh iklr g, A



fp= 10a- uUnu vk/kkfjr mPp mit 'khy l rfr; k



fp= 10b- dyk dh I [;k d fy, vk'kk tud uUnu vk/kkfjr I rfr;k

f=ekxh Idjhdj.k d ek;/e I ifrjk/kh thuk dk fijjfeMhdj.k

fi I kx fyfyu dk uj d : i e mi ;kx djr g, I kr I rfr;k e f=ekxh Idjhdj.k fd;k x;k rFkk I Hkh I ;kxk e cht fodflr gkr g, ik, x, yfdu bu Idj I ;kxk e I dkb Hkh Hk.k] mi ik/k e fodflr ugh gvka bl h idkj] Idj I ;kxk I ftue I rfr 148 x ybjkod vkj I rfr 207 x okf.kfT; d fdLe jk t 'kkfey Fk] Øe'kh rhu rFkk 19 I rfr;k gh fodflr gk IdhA

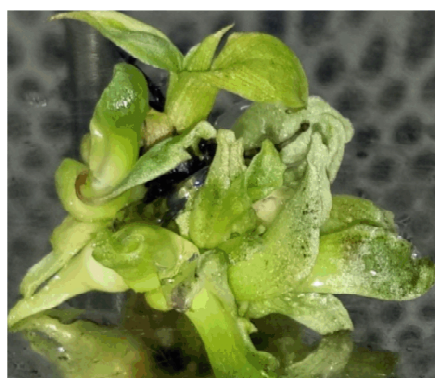
[kyh ijfkr I rfr;k dk iutuu vkj eY;kdu

dy 33 ifofV;k I [ky ijfkr cht ikr fd, x,A bue Ng I rfr;k 'kkfey FkA bue I pkbuk I

vf/kd I [;k e cht fudky x, ft Id i'pkr I rfr I [;k 690 I ikr cht k dk LFkk FkA /;ku nu ;kx; g fd pkbuht dofM'k e igyh ckj cht yxr g, n[k x, vkj 15 cht k e I doy ,d Hk.k gh ikr fd;k tk IdkA bl Ipuk I ;g I >ko feyrk g fd dofM'k idkj k e I pkbuht dofM'k e vif'k"V eknk mojr gkrh g vkj mldk mi;kx dy d dofM'k leg d I/kkj d fy, eknk tud d : i e fd;k tk I drk gA I okf/kd Hk.k I [;k fpfu;k ¼69%½ vkj ,Uuk cfu;u ¼61%½ I ikr gb tcf d okf.kfT;d fdLe eukjftre I dkb Hkh Hk.k ikr ugh gvka [ky ijfkr cht k I dy 28 mi ik/k fodflr fd, x, g ftue mi ik/kk dh I okf/kd I [;k ¼7%½ dkfFk;k vkj uikyh fpfu;k I ikr gbA

Hk.k lo/ku I vud ijkgk dk fodk I

,d Hk.k I I Pp idkj d o vf/kd I [;k e mi ik/k fodflr dju d fy, ek;/ek d I?kVu dk I/kkj x;kA dy 10 Idj I ;kxk vkj 7 [kyh ijfkr ifofV;k I dy 44 Hk.kk I vud ijkg fodflr g, ¼fp= 11%½A eknk ;k uj d : i e dydÜkk 4 dk 'kkfey djr g, fd, x, Idj I ;kxk I vud ijkg fodflr dju d ekey e loJ"B ifj.kke ikr g,A



iou x fi I kx fyfyu



uUnu x dydÜkk 4



djijoYyh x fi I kx

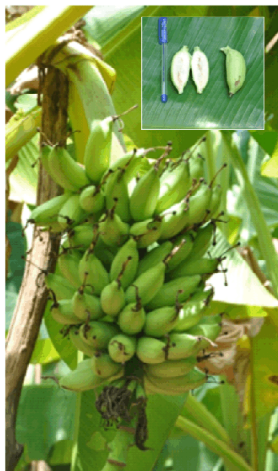
fp= 11- fofHkUu Idj I ;kxk d Hk.kk I vud ijkgk dk fodk I

mUur f}xf.kr k dh igku

f}xf.kr x f}xf.kr l dj

l rfr l [;k 97 %fil kx tkth x ekVh%

5&6 gM d xPNk rFkk xPN d 5&6 fd-xk-
vk l r Hkkj l ;Dr vfu"kd tfur Qy fodkl n[kk
x; kA ; Qy NKV gkr g ftudh yckb 9 l 10 l-eh-
gkrh g rFkk ; l n j Nkj ij iry gkr tkr g vkj
budk MBy etcr gkrk gA xn dk jx Øhe t l k
l Qn g rFkk Lokn gYdk vEyh; gA b l l cgr vf/
kd ek=k e ij kxd.k mRiUu gkr g ftudh idfr
vR; r thoufke %98&99% gkrh g %fp= 12%A



fp= 12- l rfr l [;k 97 %fil kx tkth x ekVh%

f=xf.kr xf}xf.kr l dj

l rfr l [;k 792 %m|e&,chch x fi l kx
fyfyu&, ,%

,d vuk[kh f}xf.kr %, ,% l rfr fodflr dh
xb gA bld ij kx moj gkr g rFkk Qyk e l x/k
gkrh gA Qly dh vof/k 350 fnu gA Nne ruk 1-
6&1-7 eh- Åpk gkrk g] xPN dk vkdkj cyukdj
gkrk gA xPN e Qy Bkl IV g, gkr g rFkk Qy ijh
rjg viu MBy dh vkj eM gkr gA xPNk dk idu
e 120&130 fnu yxr gA Qyk dh idfr ijh rjg
vfu"kd tfur gkrh g] xPN dk Hkkj 7 fd-xk- gkrk g
rFkk xnk ehBk vkj l x/k;Dr gkrk g %fp= 13%A



fp= 13- l rfr l [;k 792 %m|e & ,chch x fi l kx
fyfyu&, ,%

eM ;Dr l dj k dk eY;kdu

l rfr l [;k 685 %l kck x fi l kx fyfyu% vkj
l rfr l [;k 690 %l kck x fi l kx fyfyu% dk mudh
vf/kd mit rFkk idku dh J"B x.koÜkk d fy,
igpkuk x; k gA fji kV/khu vof/k d nkjku budk vkj
eY;kdu fd;k x; k rFkk bu l 42-5 fd-xk- o 38-5 fd-
xk- dh mit fjd kM dh xb tk ekn tud %l kck% dh
ryuk e Øe'kk 81 vkj 64 ifr'kr vf/kd Fkh %fp=
14a vkj b%A



fp= 14a- l rfr l [;k 685 fp= 14b- l rfr l [;k 690
xey e mxku dh n'kk d vr xr ¶; tfj;e e>ku]
i t kfr&1 %, Qvk / h% d fy, dy d l dj k dk
eY;kdu

d% dkfFk; k vk/kkfjr l rfr; k

dkfFk; k %, chch% vk/kkfjr dy 43 l rfr; k dk
xey e mxk, tku dh n'kk d vr xr , Qvk / h d

fo#) eY;kdu fd;k x;k % I kj.kh 10½ ftue I l rfr I [;k 528 %dkfFk;k x dydÜkk 4½ dk ifrjk/kh ik;k x;k D;kfd ble ^0* Ldkj fjdkM fd;k x;k ft l d ckn Øe'k I l rfr I [;k 515 %dkfFk;k x fi l kx fyfyu½ 538 %dkfFk;kx dydÜkk 4½ vkj 567 %dkfFk;k x fi l kx t k t h½ dk LFkku Fkk ftue ^2* dk jkx Ldkj fjdkM fd;k x;k a

I kj.kh 10- ,Qvk / h d fo#) ijhf{kr I rfr;k ij vk/kkfjr dkfFk;k d jkx Ldkj

I rfr I [;k	tud eknk	uj	vk l r Ldkj
515	dkfFk;k	fi l kx fyfyu	2
528	dkfFk;k	dydÜkk&4	0
538	dkfFk;k	dydÜkk&4	2
567	dkfFk;k	fi l kx t k t h	1
91	,e- yVfj;k	fi l kx t k t h	1

[k½ mUur f}xf.kr ¼, ,½

rhu mUur f}xf.kr k uker I rfr 21] 97 vkj 148 dh ,Qvk / h d fo#) NVkb dh xba bue I l rfr 21 %E; / k yVfj;k x fi l kx t k t h½ dk gYdk

I kj.kh 11- ,Qvk l h d fo#) mUur f}xf.kr k dk jkx Ldkj

I rfr I [;k	tud eknk	uj	vk l r Ldkj
21	,e- yVfj;k	fi l kx t k t h	1
97	fi l kx t k t h	ekVh	3
148	fi l kx t k t h	ykbjkd	3

I kj.kh 12- okf.kfT;d fdLe xkM u;u d I;VfVo mRifjork dh fLFkfr

mRifjork	ik/k d i Hkkx	Loi k= fodfl r ik/kk dh I [;k	ikFkfed dBkjhdj.k d i vrxr ik/kk dh I-	f}rh;d dBkjhdj.k d i vrxr ik/kk dh I [;k
b,e, l	ijkg dh ukd	&	120	&
	blh, l	360	260	300
Mhb, l	ijkg dh ukd	&	100	&
	blh, l	240	210	210
I kfm;e , t kbM	ijkg dh ukd	140	&	&
	blh, l	15	&	&
	dy	755	690	510

ifrjk/kh ik;k x;k D;kfd bl dk Ldkj ^1* Fkk % I kj.kh 11½A

4-1-3 dy %E; / ki t kfr; k½ e l Ec) ekufp=.k v/ ; ; u d ek/;e l ¶; t fj;e e>ku ifrjk/k d fy, x.k fof'k"V ekdj k dk fodk l

fofHkUu t hukeh legk uker% , , %6½] chch %7½] ,ch %9½] , , , %15½] ,ch %5½ rFkk , ,ch %30½ dk ifrfuf/kRo dju okyh ifof"V;k d dy 72 ØkM l dyu iR;d e ikp ifrdfr;k d l kFk xeyk e LFkfr fd, x,A xey e mxkb xb n'kkvk d vrxr ¶; t fj;e e>ku ifrjk/k d fy, NKVh xb 64 ifof"V;k e l %oh l h th 0124½ fd l h dk Hkh ifrjk/kh ugh ik;k x;k a

4-1-4 v&ijijkxr i tuu d ek/;e l ¶; t fj;e>y l k ifrjk/k d fy, okf.kfT;d fdLe xkM u;u %dofM'k & , , ,½ dk I /kkj

okf.kfT;d fdLe xkM u;u

dy 140 uj i"i dfyd kvk dk bl h, l dh LFkfr iuk d fy, dyl ij.k ek/;e e j[kk x;k a xkM u;u okf.kfT;d fdLe d ik/k dh ijkg dh ukd dk mi;kx djr g, l kfm;e , t kbM d fy, , yMh→50 Kkr fd;k x;k %3 ?kV d fy, 0-01 ifr'kr%A okf.kfT;d fdLe xkM u;u d ifjiDo ik/k dk tk fofHkUu mRifjork tudk rFkk ik/k d Hkkx l mRiUu fd, x, Fk] I kj.kh 12 vkj fp= 15 e iLrr fd;k x;k a



fp= 15- b,e,l l 0;RiUu okf.kfT;d fdLe xkM u;u mRifjordk dk ikFkfed dBkhdj.k

okf.kfT;d fdLe j l Fkyh

eFkyki je] Fkuh] rfey ukM e okf.kfT;d fdLe j l Fkyh d 35 l;VfVo mRifjordk d jkxxLr lykVv dh NVkb l ;g l dr feyk fd ,uvkj l hch vkj,e 217 vkj ,uvkj l hch vkj,e 100 l jkx d Øe'k 5 vkj 6 Ldkj d vkrfjd Ldkj d ckt n l eku; xPN dk Hkkj 10 fd-xk- vkj 12 fd-xk- Fkka budk cM ieku ij [kr eY;kdu d fy, Loik= ix.ku fd;k tk jgk g %fp= 16a vkj b½A

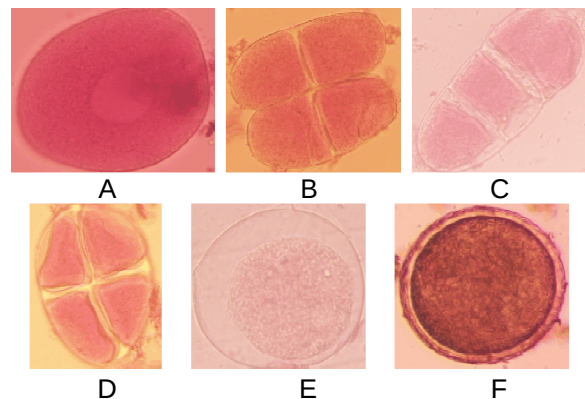


a) ,uvkj l hch vkj,e 100 b) ,uvkj l hch vkj,e 217 fp= 16a vkj b. Fkuh] rfeyukM e jkxxLr xeyk e yxu oky ¶;tfj;e e>ku ifrjk/kh mRifjord

4-1-6 dy %E; l ki t kfr;k½ d l /k½ d fy, nkgj vxf.kr k dk mRiknu

ijkx lo/ku d fy, dy dh 10 fdLek@o'kØek e mPprj j l /kkuh ;Dr ,dukfHkdh; voLFkk dh igpku d fy, fØ;kfof/k dk fodk l

l {e ch t k.k dh fodk l kRed voLFkkvk ukerih,el h] n;kM] VVKM o vR;f/kd mPp j l /kkuh ;Dr ,dukfHkdh; voLFkk vkj ifjiDo ijkx dh voLFkkvk dh igpku vxf.kr k dk mRiknu d fy, ijkxdk'k lo/ku dh ,d io 'kr gA geu dy dh 10 fdLek %fp= 17½ e vR;f/kd mPp j l /kkuh ;Dr ,dukfHkdh; voLFkk dh igpku dh g tk Øe'k 16 %ikikmy½ l l [;k 32 %xkM u;u½ l ;Dr l eku;r½ l gi= e fLFkr Fk %fp= 18½A ;g voLFkk Dyuk@o'kØek d vulkj fhkUu Fkh tk bl idkj g % ,uih,y %18½] ,ulhv kj %27½] ,uvkih %23½] j l Fkyh %23½] tjekuh %19½] iou %26½] djijoYyh %17½] uUnu %22½A bld vfrfjDr ;g voLFkk i ;koj.kh; n'kkvk rFk l gi= e [kjkp dh l [;k d vulkj fhkUu&fhkUu Fkha bld i'pkr ik/k l i"i dfydk, ,d= dh xbA l eku;r½ ijk u l gi=k e ,d ukfHkdh; voLFkk rc n[kh xb tc i"i dfydk dk l gi=k ij [kjkp dh de l [;k oky MBy l ,d= fd;k x;kA



fp= 17- dy dh vfr mPp j l /kkuh ;Dr ,dukfHkdh; l {e ch t k.k voLFkkvk dh fodk l kRed voLFkk, %a½ ih,el h] %b½ n;kM] %c½ fV;kM] %d½ VVKM] %e½ vfr mPp j l /kkuh ;Dr ,dukfHkdh; l {e ch t k.k vkj %f½ ifjiDo ijkx d.k

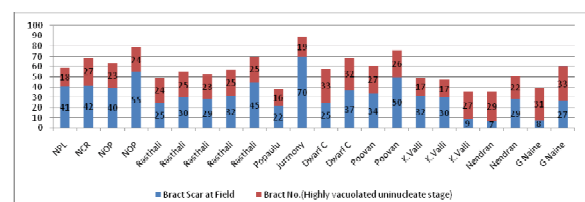


Fig. 18. Highly vacuolated uninucleate microspore stages in different banana cultivars/lines

4-1-7 okf.kfT;d fdLek u; iou $\frac{1}{4}$,ch $\frac{1}{2}$ vkj xkM u;u $\frac{1}{4}$,,, $\frac{1}{2}$ d J"B Dykuk dh igpku o mudk eY;kdu

J"B Dykuk dk lo{k.k ,o ldyu

okf.kfT;d fdLek u; iou $\frac{1}{4}$,ch& l[;k e 2 $\frac{1}{2}$ vkj uUnu $\frac{1}{4}$,,ch& l[;k e 17 $\frac{1}{2}$ d J"B Dykuk d ldyu gr rfey ukM d ukxjdkby vkj fr : uyoyh ftyk rFkk djy d ekykije fty dk lo{k.k fd;k x;kA okf.kfT;d fdLe uUnu d J"B Dykuk uker% mPp mit t'khy uUnu] fdovY uUnu] vUk uUnu] Lo.ke[kh



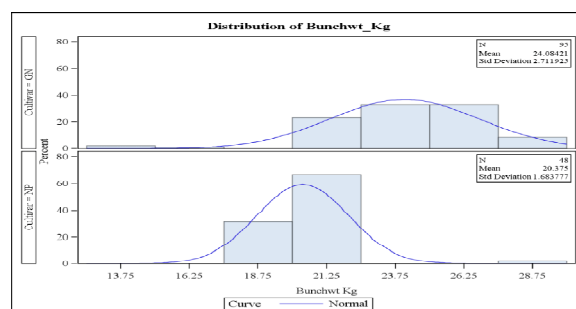
a. ckuk u; iou $\frac{1}{5}$ -5 QV% b. Dyku l[;k 13 $\frac{1}{2}$ 22 fd-xk- $\frac{1}{2}$ fp= 19a. vkj b. ckuk u; iou $\frac{1}{4}$,ch $\frac{1}{2}$



a. Dyku l- 73 $\frac{1}{2}$ 1-20 eh- $\frac{1}{2}$ b. Dyku l[;k 75 $\frac{1}{2}$ 1-25 eh- $\frac{1}{2}$ fp= 20a vkj b- okf.kfT;d fdLe xkM u;u $\frac{1}{4}$,,, $\frac{1}{2}$ d cku Dyku

o okf.kfT;d fdLe u; iou uker% cku rFkk mPp mit t'khy Dyku Hkk-d-v-i-&jk"Vh; dyk vul/kku dUn d Qke ij LFkffir fd, x, g $\frac{1}{2}$ fp= 19a vkj b rFkk 20a vkj b $\frac{1}{2}$ A

okf.kfT;d fdLek u; iou vkj xkM u;u d J"B Dykuk dh igyh Qly d eY;kdu l ;g ldr feyk fd ftu x.kk d fy, mudh igpku dh xb Fkh] mud ekey e budk fu"iknu J"B FkA xkM u;u d l Hkh cku Dykuk d ik/kk dh Åpkb 1-8 eh- l de Fkh rFkk mudh mit 25&35 fd-xk- d chip Fkh tcfm mPp mit t'khy u; iou d Dyku l 16&28 fd-xk- d xPN mRiUu g,A nkuk gh fdLek d ekey e iMh dh Qly igyh Qly dh ryuk e cgrj FkA ckD llykV fo'y"K.k $\frac{1}{2}$ fp= 21 $\frac{1}{2}$ l ;g inf'kr gvk fd u; iou d l dyuk dk >dko fuEu mit dh vkj Fk blfy, mPp mit nu oky Dykuk d l dyu ij vf/kd cy nr g, vkj lo{k.k fd;k tkuk pkfg,A blh idkj] xkM u;u l dyuk dk >dko cku iu dh vkj Fk] vr% de mit l ;Dr oreku l dyuk l cku xkM u;u Dykuk d pu tku dh vikj {kerk gA i/kku ?kVd fo'y"K.k $\frac{1}{2}$ ih l h, $\frac{1}{2}$ l J"B Dyku p;uk dk rhu legk uker% 1- xkM u;u d cku@cku o mPp mit t'khy Dyku 2- xkM u;u d mPp mit t'khy Dyku rFkk 3- u; iou d mPp mit t'khy Dykuk e ckV tku dh vko';drk Li"V gbA



fp= 21- ckD llykV fo'y"K.k



4-2 Qlykriknu ,o IL;kÜkj ik|kfxdh

4-2-1 dy e ik"kd rRok dh xfrdh ij v/; ;u

u; iou ¼iMh&2½

rMkb dh voLFkk ij u; iou ¼iMh 2½ e vkjMh,Q d c<r g, Lrjk e ukbVktu] QkLQkjI vkj ikVkt'k dk mi;kx dju ij 'k"d inkFk d mRiknu ¼Mh,eih½ e /khj&/khj of) ikb xb tk ryuh; dh vi{kk 150 ifr'kr FkA 150 ifr'kr vkjMh,Q ij lokPp 12622 xk- Mh,eih fjdkM fd;k x;k tcfd ryuh; e ;g 10665 xk- gh fjdkM gvka ik/k e dy Mh,eih dk forj.k bl Øe e Fkk ¼ xPNk ¼3722 xk-½ > ruk ¼2780 xk-½ > ?kudn ¼1785 xk-½ > iÜkh ¼1502 xk-½ > MBY ¼887 xk-½ > i.kor ¼319 xk-½ > tM ¼297 xk-½ > uj dfydk ¼118 xk-½ ¼fp= 22a½A rMkb dh voLFkk ij u; iou }kjk dy ik"kd rRo vrxg.k ¼fd-xk-@g-½ xPN dh rMkb d ek/;e l ik"kd rRok dk gVuk ¼fd-xk-@g-½ rFkk iu'pfØr ik"kd rRo ¼fd-xk-@g-½ dk Kkr fd;k x;k ¼ l k j .kh 13½A

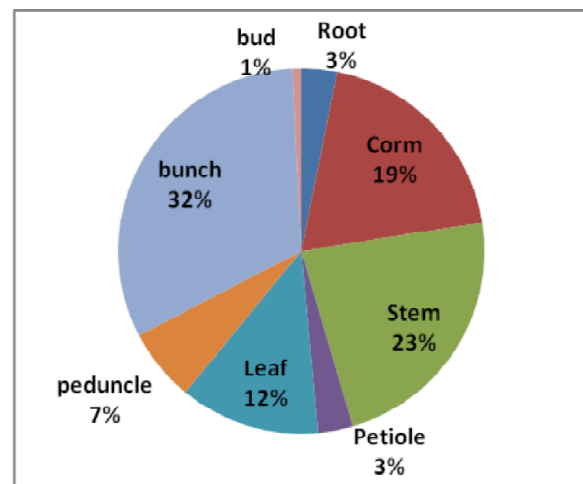
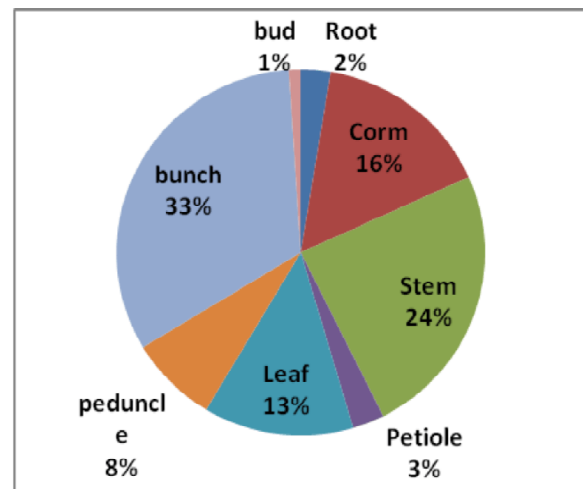
j l Fkyh ¼iMh&2½

rMkb dh voLFkk ij j l Fkyh ¼iMh 2½ e vkjMh,Q d c<r g, Lrjk e ukbVktu] QkLQkjI vkj ikVkt'k dk mi;kx dju ij 'k"d inkFk d mRiknu ¼Mh,eih½ e /khj&/khj of) ikb xb tk ryuh; dh vi{kk 150

l k j .kh 14- xPNk dh rMkb d i'pkr u; iou vkj j l Fkyh d vif"K"Vk l r;kj oeh dEikLV e ik"kd rRo

ik"kd rRo ¼fd-xk-@g-½	u; iou ¼iMh&1½			j l Fkyh ¼iMh&1½		
	dy vrxg.k	xPN dh rMkb d ek/;e l gVuk	iu'pfØr	dy vrxg.k	xPN dh rMkb d ek/;e l gVuk	iu'pfØr
ukbVktu	393	124	269	394	157	237
QkLQkjI	57	20	37	75	26	49
ikVf'k;e	943	488	455	1069	596	473
rkck	2-06	0-43	1-63	2-49	0-60	1-89
eXuh t	6-36	0-59	5-77	4-77	0-44	4-33
tLrk	2-74	1-29	1-45	3-56	1-83	1-73
ykg	4-66	1-22	3-44	4-82	1-52	3-30

ifr'kr FkA 150 ifr'kr vkjMh,Q ij lokPp 18564xk- Mh,eih fjdkM fd;k x;k tcfd ryuh; e ;g 13909



fp= 22a vkj b. dy dh rMkb ij u; iou ¼r-2½ vkj j l Fkyh ¼r-2½ dk Mh,eih v'k

xk- gh fjdkM gvKA ik/k e dy Mh,eih dk forj.k bl Øe e Fkk % xPNk %5013 xk-% > ruk %3607 xk-% > ?kudn %3052 xk-% > iÙkh %1946 xk-% > MBy %1014 xk-% > tM %494 xk-% > i.kor %485 xk-% > uj dfydk %124xk-% %fp= 22b%A rMkb dh voLFkk ij jLFkyh }kjk dy ik"kd rRo vrxg.k %fd-xk-@g-% xPN dh rMkb d ek/e I ik"kd rRok dk gVuk %fd-xk-@g-% rFkk iu'pør ik"kd rRo %fd-xk-@g-% dk Kkr fd;k x;k % I kj.kh 13%A

vif'k"Vk dh dp, dh [kkn cukuk

xPNk dh rMkb d ckn vif'k"Vk I oehdEikLV ;k dp, dh [kkn r;kj dh xbA xPNk dh rMkb d i'pkr u; iou rFkk jLFkyh d ,d ik/k I lfr oeh dEikLV e vkr ik"kd rRok dh lknrk %% rFkk ik"kd rRo v'kk %xk-@ik/kk% dk vkdyu fd;k x;k % I kj.kh 14%A

ekbØk I k"V ,Dly I k"Vo;j dk mi;kx djd rhu iÙkh dh voLFkkj 10 iÙkh dh voLFkkj 20 iÙkh dh voLFkkj ijkg of) dh voLFkk rFkk rMkb dh voLFkk d lnHk e ik"kd rRo vrxg.k d ?ku cginh; oØ lfr fd, x, rkfd u; iou %r-2% vkj jLFkyh %r-2% e ik"kd rRok d lp;u d iVu dk eY;kdu fd;k tk l dA bu ?ku cginh; oØk dk mi;kx 'k" d inkFk d mRiknu d lnHk e ik"kd rRok d vrxg.k

o lxghr gku dk iokueku yxku d fy, fd;k x;kA bl d vrxr of) voLFkkvk d nkjku u; iou %r-2% rFkk jLFkyh %r-2% d fofHkUu [kMk dk 'kkfey fd;k x;kA iokuefur rFkk i;of{kr ekuk d chp lek;ftr R² eku mPp Fk vkj bl l oØ dh l k f[;dh l R;rk l fuf'pr gbA

bu vkdMk d vk/kkj ij ik"kd rRok d ctVhdj.k I ;g Li"V gvk fd ikVf'k;e dk NmDj xPNk dh rMkb d ek/e I ik"kd rRok dk gVuk ik"kd rRok d iu'pØ.k dh ryuk e 2 I 10 xuk de Fkk vkj bruk gh dy d vxy Qly ekle d fy, i;klr g yfdu bl d fy, 52&56 ifr'kr ikVf'k d ifrLFkk iu dh vko';drk gkrh gA ijkg dh of) d nkjku iMh dh Qly okyh feVvh e 50-68 dh K dh l {ke cQju {kerk fjdkM dh xb %cmol.kg⁻¹ (M/L^{-0.5}) tcf d rMkb d le; ;g 49-88 Fkh ft l l ikVf'k;e d mYy[kuh; [kuu dk l dr feyrk g vkj ;g prkouh nh tkrh g fd ijorh Qly ekle d nkjku ikVf'k;e dh bl deh dh i;klr Hkjikb dh tkuh pkfg,A

4-2-3 dy dh mRikndrk c<ku d fy, xPNk ic/k dh ik|kfxdh dk fodkl

dy dh okf.kfT;d fdLe u; iou dh igyh iMh dh Qly e ifr xPNk mojd dh 125 ifr'kr 150 ifr'kr vkj 175 ifr'kr vu'kflr [kjk d

I kj.kh 14- xPNk dh rMkb d i'pkr u; iou vkj jLFkyh d vif'k"Vk I r;kj oeh dEikLV e ik"kd rRo

oeh dEikLV e: ik"kd rRo	u; iou %iMh&u% lknrk	v'k %xk-@ik/kk%	jLFkyh %iMh&u% lknrk	v'k %xk-@ik/kk%
ukbVktu	1-19%	101	0-70%	89
QkLQkj l	0-17%	14	0-14%	18
ikVf'k;e	2-06%	177	1-36%	174
rkck	73-37 ihih,e	0-63	53-13 ihih,e	0-69
eXuh t	259-97 ihih,e	2-22	125-88 ihih,e	1-63
tLrk	63-26 ihih,e	0-53	52-33 ihih,e	0-67
ykg	146-28 ihih,e	1-25	92-23 ihih,e	1-23

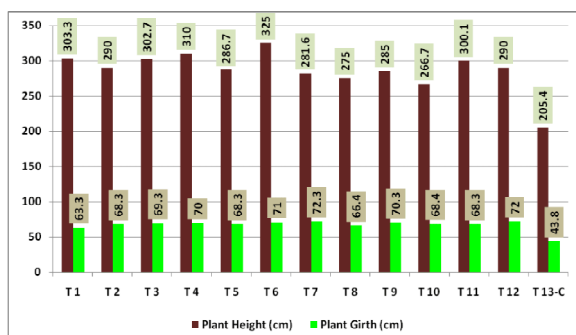


lkj.kh 15- of) dh fofHkUu voLFkKvk ij xkM u;u }kjk ikkd rRok dk vrxg.k vkj iUkh e ikkd rRo dh lknrk,

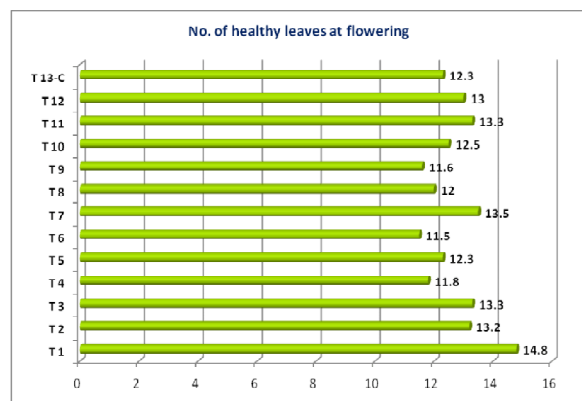
ikkd rRo	20&iUkh voLFk		ijkg of) dh voLFk	
	iUkh e ikkd rRo dh lknrk %%	ikkd rRo vrxg.k %xk-@ik/kk%	iUkh e ikkd rRo dh lknrk %%	ikkd rRo vrxg.k %xk-@ik/kk%
ukbVktu	2-78	96-3	2-65	174-9
QkLQkj l	0-29	14-4	0-29	28-7
ikVf'k;e	3-12	196-6	3-21	317-8
dfYl;e	0-65	75-1	0-72	142-6
eXuhf'k;e	0-39	36-1	0-34	67-3

vkjMh,Q nu ij ikkd ik/kk d lFk&lFk ifr xPNk idnk dh l[;k 1 ;k 2 ;k 3 ;k 4 cuk, j[ku e lkg;rk feyhA ,lk bu fofHkUu ikni lefV;k d lnhk e gvkA 2-0 eh- x 2-0 eh- d vrjky ij iR;d xM< e ,d idn dk jkiu dh fd lKuk }kjk viukb tku okyh ijijxR fof/k dk viukr g, ryuh; mipkj fd;k x;k ftle ikkd ik/k d i"iu d i'pkr ifr ik/kk ,d idn j[kr g, 100 ifr'kr vkjMh,Q dk mi;gx gvkA ik/k d of) lc/kh ikpyk] i"iu mit rFk mit lc/kh x.kk d vykok ik/kk d ikkd rRok dh fLFkr ij fjdkM fd, x, i;o{k.kk l mipkfjr ik/kk e mYy[kuh; vrj n[kk x;k %fp= 25%A

okf.kT;d fdLe u; iou dh iMh dh Qly e ik/k dh of) lc/kh ikpy] mit rFk Qyk d x.k mipkfjr ik/kk e mYy[kuh; :i l fHkUu ik, x,A ftu ik/kk e of) dh fofHkUu voLFkKvk e ifr xPNk



fp= 23- okf.kT;d fdLe u; iou %i iMh e ik/k dh Apk vkj ekVkb %l-eh- e% ij ifr xPNk rFk mojdk dh [kjkd dk ik/kk dh l[;k ij iMu okyk iHkko



fp= 24- okf.kT;d fdLe u; iou %i iMh e LoLFk ifUk;k dh l[;k ij ifr ik/kk xPNk dh l[;k vkj mojdk dh [kjkd dk iHkko



fp= 25- okf.kT;d fdLe u; iou e xPNk ic/k lc/kh ijHk.k e of) dh fofHkUu voLFkKvk ij n[kk x;k ikkd ik/k rFk vutkr idn

idnk dh vf/kd l[;k Fkh o ik/k yc Fk vkj mud Nne ru dh ekVkb ikkd ik/k d i"iu d i'pkr ,d idn j[kr g, ryuh; ik/kk dh vi{k vf/kd FkhA mipkj Vh6 %ikkd ik/kk \$ jkikb d pkFk o NB ekg e ,d idn dk c<u nuk \$ ifr xPNk 175 ifr'kr

vkjMh,Q dk mi;kx½ e lcl yc ik/k ¼325 l-eh-½
fjdKM fd, x, tcfD Vh7 mipkj ¼ik"kd ik/kk \$
jkikb d 5o] 7o vkj 8o ekg ij iR;d voLFkk e ,d
idn dk c<u nuk \$ ifr xPNk 125 ifr 'kr vkjMh,Q
dk mi;kx½ l Nne ru dh ekVkb lokPp ¼72-3 l-
eh-½ ikb xb ¼fp= 23 vkj 24½A

iÙkh dh yckb vkj iÙkh dh pkMkb d lnHk e
iÙkh d of) lc/kh x.k ryuh; ik/kk dh vi{kk mipkfjr
ik/kk e vf/kd ik, x,A bld vfrfjDr iÙkh dh
yckb vkj pkMkb ik"kd ik/kk dh ryuk e iMh d ik/
kk e lokPp FkhA

4-2-4 dy e iÙkh mRiknu d fy, lL; io ,o
lL;kÙkj rduhdK dk fodkl

dy d iÙkh mRiknu ij idnk dh l[;k dk iHkko

fdlkuk }kjk viukb tku okyh fof/k;k dk 'kkfey
djr g, iÙkh d mRiknu ij idnk dh l[;k dk D;k
iHkko iMrk g] bldk v/;u dju d fy, okf.kfT;d
fdLe iou ij ,d ijh{k.k fd;k x;kA igyh Qly
e Qy yxu fn, x, vkj xPNk dh rMkb dh xBA
igyh Qly dh mit eb l tykb 2017 d nkjku
ifr xPNk 9 l 13 fd-xk- d chp jghA igyh iMh dk
iÙkh d mnn'; l cu jgu fn;k x;kA okf.kfT;d
fdLe iou e ifr Vhyk 3 idnk l lokPp l[;k e
rMkb ;kx; ifÙk;k iklr gb ft ld i'pkr Øe'kh ifr
Vhyk pkj vkj ikp idnk dk LFkk FkA ifr Vhyk rhu
idn j[ku l ifr ekg 20-08 rMkb ;kx; ifÙk;k iklr
gb vkj iÙkh mRiknu 13 l 33 iÙkh Fkk] tcfD ifr
Vhyk pkj idn j[ku l ifr ekg 17-0 rMkb ;kx;
ifÙk;k iklr gb vkj iÙkh mRiknu 12 l 19 d chp
FkA rFkfi] ifr Vhyk 5 idn j[ku ij ifr ekg 13-
16 rMkb ;kx; ifÙk;k iklr gb tcfD ifr Vhyk 5
idn j[ku l ;g l[;k 8 l 20 rd FkhA blh idkj]
ifr Vhyk 3 ifÙk;k j[ku ij iÙkh {k= 7-876 l 18-377
eh-2 d chp rFk 5 idn j[ku l 4-977 l 13-569 eh-
2 d chp FkA ifr Vhyk 3 idn j[ku l ifr ekg 0-

743 eh-2 iÙkh {k= dh ifÙk;k mRiUu gb tcfD ifr
Vhyk pkj idn j[ku l ifr ekg 0-705 eh-2 iÙkh {k=
rFk ifr Vhyk 5 idn j[ku l ifr ekg 0-562 eh-2
iÙkh {k= dh ifÙk;k mRiUu gbA

4-2-5 ?kyy rFk fu;kr cktjk d fy, dy e
: ikrfjr okrkoy.k idftx rduhdK dk fodkl

dy dh fu/kkuh vk; c<ku d fy, lfØ; idftx

viuk, x, fofHku mipkj l;kx ¼ lfØ; idftx
lkexh uker% bfFkyhu vo'kk"kd] o² gVku dh ;fDr]
ueh gVku dh ;fDr vkj co² gVku dh ;fDr] mUur
lL;kÙkj lkt&lHkky mipkj] mld i'pkr icyhcx
e ifdx rFk 13-5° l- rkieku ij 'khr HkMkj xg e
j[ku l dy dh okf.kfT;d fdLe xkM u;u dh fu/
kkuh vk; 108] 94 vkj 60 fnu c<h rFk ryuh; dh
vi{kk ifjiDork Hkh 75] 85 vkj 95 ifr 'kr jghA bl
nkjku dy d x.koÙk lc/kh ikpyk e Hkh dkb fxjkoV
ugh n[kh xBA 80&85 ifr 'kr ifjiDork ij rkm tku
ij uUnu dh fu/kkuh vk; d{k rkieku ij HkMkj.k dh
ryuh; n'kk dh vi{kk ¼7 fnu rd½ 32 fnuk rd c<
xBA bl mipkj d nkjku Qly dk 13-50 l- rkieku
ij HkMkfjr fd;k x;k FkA dy dh okf.kfT;d fdLe
xkM u;u d ifjiDou d fy, viukb xb fofHku fof/
k;k e l bfFkyhu xl l mipkfjr Qyk ¼24 ?kV d
fy, 100 ihih,e ij½ e le: i jx dk fodkl gvk
rFk d{k rkieku ij mudh fu/kkuh vk; 6 fnu vkj
22° l- HkMkj.k rkieku ij 12 fnu jghA

4-2-6 dy d vkV dk ifrjk/kh LVkp lc/kh dk;
vkj bl l fMtkbuj [kk] inkFk dk fodkl

dy d Lykbl dk l[kku d fy, 'k"ddk dk
ekudhdj.k

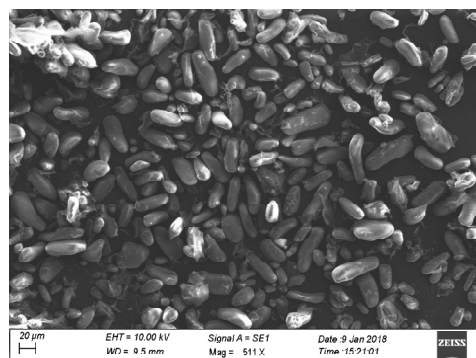
fuokr 'k"dd e dy d Lykbl dk l[kku ij
¼300 feuV½ mul ty rth l gVk tcfD lkj 'k"dd
e bu Lykbl d i.k 'k"du e 300 feuV yxA lonh
x.kk d lnHk e dy d Lykbl dk jx] cukoV] lx/

k vkj l [ku d i'pkr mudk Lokn fuokr 'k"du dh n'kk e J"B FkA fuokr vkou e 'k"du l L:62.42; a:-2.09 vkj b:13.18 d jx eku fjdkm fd, x,A lkj 'k"dd e ;k /ki e l [kku l dy d Lykbl dk jx dN xgjk gk tkrk g ft l dk eku 55-93 gkrk gA dy dh ekFku] lckj uUnu o xkM u;u dh Qyko 'kfDr dk Hkh v/; ;u fd;k x;kA rkieku c<u d l kFk&l kFk Qyko e Hkh of) gkrh gA of) dk ;g Øe ekFku 1/13-27%1/2 > lckk 1/12-93%1/2 > uUnu 1/11-33%1/2 > vkj xkM u;u 1/10-85%1/2 FkA fofHkuu vkVv d ,QVhvkbnvj fo'y"K.k l ;g Li"V gvk fd uUnu fdLe d vkV l vU; vkVv dh ryuk e vf/kd ek=k e to lfØ; ;kfxdk dk lp;u gkrk gA

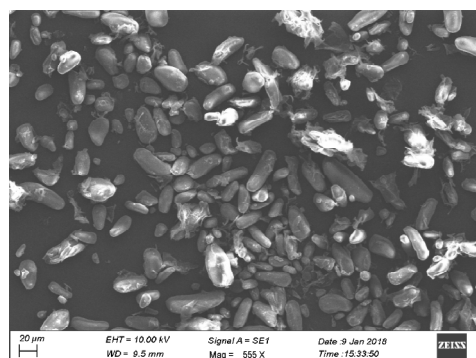
dy l iklr LVkp d dk;kRed x.k

dy d LVkp d nkuk dk Ldfux byDVku ekbØxkQ fp= 26 e fn, x, gA dy d LVkp d nkuk u vMkdj fn[kkoV t l h leku vkdf; k inf'kr dhA fdLe xkM u;u d nkuk dh vkdf; vf;fer vMkdj Fkh ft l dh l rg fpduh Fkh vkj LVkp dh l jpuk vf/kd l?ku FkhA fdLe ekFku e nkuk dh vkdf; vk l r NM d leku] vf;fer vMkdj Fkh rFkk okf.kT;d fdLe uUnu d LVkp d nkuk dh vkdf; ych NM d leku Fkh o mudh l rg fpduh FkhA dy dh puh xb fdLe e ,ekbykt d ifr'kr e mYy[kuh; vrj n[kk x;k tk 19-87 l 22-32 ifr'kr d chp FkA bl v/; ;u e lokpp ty vo'kk"K.k {kerk 1/4MCY; , l h1/2 okf.kT;d fdLe ekFku e ikb xb 1/3-25 ifr'kr1/2] tcfD bl dh ryuk e okf.kT;d fdLe uUnu e ;g 2-93 ifr'kr] okf.kT;d fdLe xkM u;u e 3-03 ifr'kr vkj okf.kT;d fdLe lckk e 2-87 ifr'kr FkhA

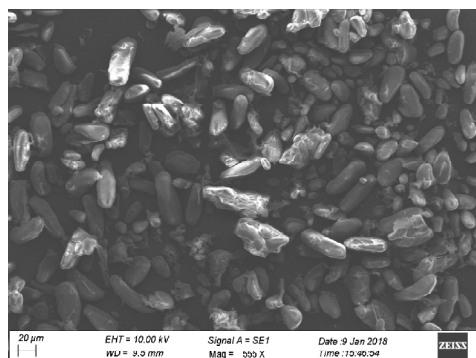
dy d LVkp d jx l c/kh ikpyk 1/4L*, a* vkj b*1/2 l ;g Li"V gvk fd dy d LVkp dk L* eku 71-98 l 84-88 d chp FkA jx ijkoruk 1/4lQniu1/2 dk mPprj L* eku o LVkp dh 'k) r k Hkh mPprj FkA dy d LVkp dk a* eku fuEu Fkk vkj ;g &2-60 l &0-38



ekFku



uUnu



xkM u;u

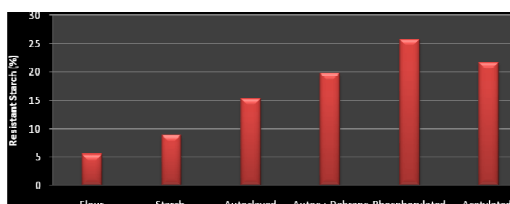
fp= 26- , l b,e d vrxr dy dh fofHkuu fdLe d LVkp d nkuk dh Nk;k;

d chp jgkA ueuk e mPprj a* eku ykykeh dk l dr nrk gA gekj v/; ;u e l Hkh ueuk e fuEu eku Fkh ft l ;g l dr feyk fd ; ueu LVkp d x.k d l nHk e 'k) FkA LVkp dk b* eku 9-06 l 16-79 d chp fHkuu&fHkuu FkA

LVkp e l/kkj d fy, ifØ;kvk dk fodkl

, tkbeh fof/k l fudky x, LVkp dk fofHkuu fof/k;k dk mi;kx djd l /kkjk x;kA pfd LVkp e

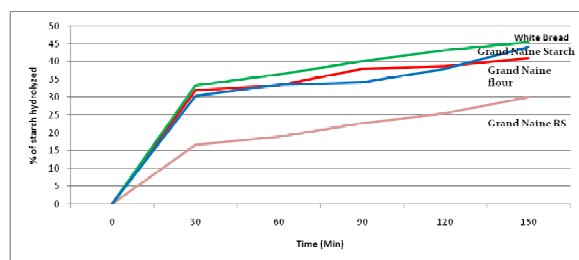
fofHkUu mRiknk dk r;kj dju dh ifØ;k e bLrekY dju d nkjku ifrjk/kh LVkp v'k dk [kk nu dh iofÜk gkrh g blfy, : ikrfjr ;k l/kj LVkp dk mRiUu dju d fy, fofHkUu fof/k;k t l vKvKdyfox] vKvKdyfox \$ Mhckfpx] jk l k;fud fof/k;k t l QkLQjkby'ku] dkckukby'ku vkj ,f lVky'ku dk mi ;kx fd;k x;kA jVxM'ku d i'pkr bu : ikrfjr ;k l/kj LVkp dk ifrjk/kh LVkp v'k d fy, fof'k"V : i l fo'y" k. k fd;k x;kA ;g n[kk x;k fd QkLQjkbyfVM LVkp l , l k : ikrfjr LVkp mRiUu g, ft le vU; fof/k;k dh ryuk e ifrjk/kh LVkp mPprj Lrj ¼25-7 ifr'kr½ cuk jgk ¼fp= 27½A



fp= 27- LVkp d : ikrj.k dh fofHkUu fof/k;k dk ifrjk/kh LVkp v'k ¼%½ ij iHkko

Loik= LVkp ty vip;u d fy, ifØ;k dk ekudhdj.k rFkk mRiknk dk Xykb l fed l pdkd

mRiknk d Xydk t vo'kk" k. k eY;kdu dk fo'y" k. k fd;k x;kA ;g n[kk x;k fd dy d LVkp vkj : ikrfjr LVkp e dy d vKv dh ryuk e Xydk t dk de ek=k e vo'kk" k. k gkrk gA 65½25½10 d vuikr e enk ½ dy dk vKv vkj : ikrfjr LVkp l r;kj fd, x, iklrk e Hkh vi{kkdr fuEu Lrj ij Xydk t dk vf/k" k. k fjdkM fd;k x;kA b l h idkj] Loik= LVkp ty vip;u d vKdMk l 150 feuV rd Å"ek;u d



fp= 28- lQn cM LVkp dh ryuk e xkM u;u d LVkp e Loik= LVkp ty vip;u dk iVu

i'pkr xkM u;u vkj m l l r;kj lQn cM dh ryuk e okf.kT; d fdLe xkM u;u d : ikrfjr LVkp d ty vip;u iVu e mYy[kuh; : i l deh gkrh g ¼fp= 28½A

dy d j'k dk y{k.k&o.ku rFkk xknghudj.k dju dh ifØ;kvk dk ekudhdj.k

ikp fdLek uker½ xkM u;u] iou] ikiemy] jM cukuk vkj djijoYyh d Nne ru j'k fudkyu d fy, mi ;kx e yk, x, A lokPp Nne ruk j'kk olyh djijoYyh l gb ¼2-49 ifr'kr½ tcf d lcl de xkM u;u d ekey e ¼1-1 ifr'kr gb½A VVu 'kfDr] VVu foLrkj] VDI rFkk rU;rk t l x.k jM cukuk d j'k e J" B ik, x, ¼975-97 th, Q] 3-17 ifr'kr] 33-7 VDI] 28-40 cN/VDI vkj 180-25 MPa½A lY; ykt j'k dk e[; ?kVd gkrk gA lokPp lY; ykt v'k djijoYyh d j'k e fjdkM fd;k x;k ¼55-84 ifr'kr½ ft l d i'pkr ;g iou fdLe d j'k e ik; k x;k ¼54-57½A

j'k dh lrg ij ,df=r gk tku okyh xj&lY; ykft d xkn t l h lkexh dk blfy, gVkuuk iMrk g rkfd j'k dk fofHkUu : i l mi ;kx fd;k tk l dA j'kk dk iDVhut] ydt vFkok nkuk , tkbek l mipkfjr fd;k tkrk g vkj bld l kFk gh fofHkUu l knrkvk ij l kFk; e gkbMkD l kbm l Hkh mipkfjr fd;k tk l drk gA ifj.kkek l ;g inf'kr gvk fd j'kk ij ydt d mipkj l J" B Hkkrfd&;kf=d x.kk d l kFk&l kFk mudh jk l k;fud l jpuk Hkh J" B gk tkrh gA

Q:fyd vEy mRiknu d fy, l{et hok dh NVkb

Ng thok uker½ dodh; i tkfr;k&l hMh, Q1] l hMh, Q2] l hMh, Q3 vkj thokf.od i tkfr;k & ih, u1] l hMh2] l hMh6 foyxdk dk NVkb d fy, xk; d xkcj l iklr fd;k x;kA ih, u1] l hMh, Q2 vkj lg&lo/ku d p;fur l : ik dk lclVV e l jkfir fd;k x;kA bu ueuk dk 150 vkjih, e ij 35º



rkieu cuk, j[kr g, Å"ek;d 'kdj e Å"ekf;r
fd;k x;kA fo'y"%.k l l Hkh thok }kjk Q:fyd vEy
mRiUu gkr g, ik;k x;kA 72 ?kV d Å"ek;u d
i'pkr iklr ifj.kkek e ih,u1] l hMh,Q2 vkj lhvk&
dYpj l l jkfir ueuk e Q:fyd vEy dh mifLFkr
inf'kr gb tcf d Q:fyd vEy dk lokPp mRiknu
lg&lo/ku dk mi;kx dju ij iklr gvk %394-76
fe-xk-@fd-xk-%A bl idkj] thok d lg&lo/ku dk
Q:fyd vEy d mRiknu e dkjxj : i l blreky
fd;k tk l drk gA

dy d vkV ij vk/kkfjr fu%lkfor mRiknk dk
lef)dj.k

xktj %ifrvkDlhdkjd% rFkk pdnj d j l k %iR;d
70 l 100 ifr'kr% l le) dy d vkV ij vk/kkfjr
fu%lkfor mRiknk %uMY l % dk ekudhdj.k rFkk fodk l
fd;k x;kA bl d fy, iklrk cuku d ;= dk mi;kx
fd;k x;kA fofHkUu l ;kxk e l xktj d j l l le)
rFkk 70%30 d vuikr e % l Hkh mnn'; d fy, i;Dr
gku oky vkV & %enk % dy dk vkV% ik l r fd, x,
l ;kx l le) dy d vkV ij vk/kkfjr fu%lkfor
mRikn dk Lohdkj Lrj %gmkfud iekuk % 8-33% dk
ik;k x;kA

4-3 dcf;dh ,o tojlk;ufokku

4-3-1 dy e mPp rkieku rFkk enk e ueh dh deh lc/kh ifrcy % dy e mPp rkieku o enk e ueh dh deh d ic/k rFkk mPp rkieku d ifr lfg".krk dh ;kf=dh

dy dh okf.kfT; d fdLe xkM u;u e l[k dh voLFkk dk c<ku d fy, i;Dr gku oky jlk;uk d lFk o bu jlk;uk d fcuk l[kk ifrcy lft r d j r g, bld idk'k i.kkyh dh LoLFkrk rFkk dk; dk fo'y"n.k fd;k x;ka [kr e mxk, x, dy d ik/kk dk l[kk ifrjk/c<ku oky jlk;uk [,flVkbY lfyflfyd vEy %, , l, % \$ C; VkbYfVM gkbMkD l h Vky;hu %ch,pVh% d lEid e j[ku l fLFkj voLFkk d vrxxr ih, l ii dh ek=kRed mit %YII% vuipkfjr 'k'd n'kk oky ik/kk dh mit %0-37 l 0-41% dh ryuk e mPprj fjdkM dh xb %0-47 l 0-53%A l[kk lc/kh l Hkh mipkj %0-89 l 2-03 μ eky dh $\text{CO}_2\text{m}^{-2}\text{s}^{-1}$ e flfpr ryuh; n'kk %18-07 μ eky dh $\text{CO}_2\text{m}^{-2}\text{s}^{-1}$ dh ryuk e idk'k l'y"n.k e deh vkbA ,lk enk ty {kerk d &0-8 l &0-9 MPa rd ij igpu ij gvkA rFkfi] , , l, \$ ch,pVh l ikbe fd, x, ik/kk e xj&ikbe fd, x, l[kk d lEid e vk, ik/kk dh ryuk e 65 ifr'kr vf/kd idk'k l'y"n.k fjdkM fd;k x;ka enk e ueh dh deh d ifrcy e j[k x, o ikdfrd idk'k d vrxxr yk, x, dy e ek=kRed mit %YII% vkj Fv/Fm vuikr fuEu idk'k dh n'kk %50% ikdfrd idk'k% dh ryuk e ikdfrd idk'k e vi{kkdr de fjdkM fd;k x;ka

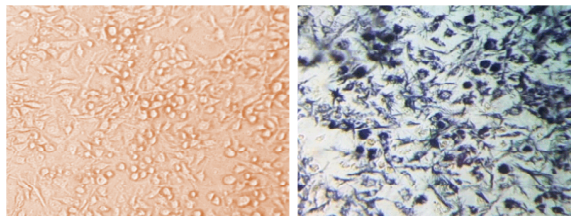
dy dh xkM u;u fdLe e i"ih; ikbekfM;y fudyu dh voLFkk e l[kk ifrcy d fy, fd, x, ,d vU; i;kx d vrxxr ihih,Q,e %xykc jx dk QdYVfVo eFkkbykVki% rFkk ,flVkbY lfyflfyd vEy %, , l, % dk mi;kx l[kk ifrcy mipkj d io fd;k x;ka flfpr mipkj e l[kk ifrcy d mipkj e iklr gku oky 7-75 fd-xk- dh ryuk e 27-25 fd-xk- xPNk Hkkj fjdkM fd;k x;ka rFkfi] ihih,Q,e

l ikbe fd, x, o l[kk ifrcy dh n'kk e yk, x, ik/kk e , , l, l mipkfjr ik/kk l iklr gku oky 12-32 fd-xk- mit dh ryuk e 9-75 fd-xk- mit fjdkM dh xbA

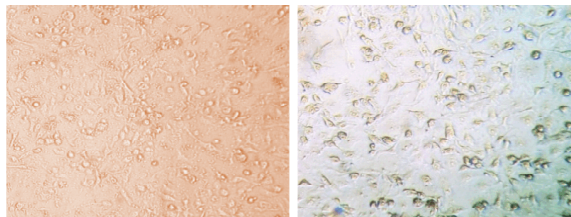
of) fu;=d d : i e ikvf'k;e lYQV %1-5 ifr'kr% dk mi;kx dju ij enk e ueh dh deh d ifrcy d fy, bl jlk;u dk xPNk ij fNmko dju l dy dh okf.kfT; d fdLe xkM u;u e l[kk ifrcy d vrxxr j[k x, ik/kk dh ryuk e Qyk d Hkkj e 17-35 ifr'kr l vf/kd dh of) n[kh xBA ,chch fdLe e ifUk;k e 5-11 l 9-72 fe-xk-@xk- ,QMCY; d ijk l dk DykjkfQy jtd fjdkM fd;k x;ka

dy d id g, Qyk e xj id g, Qyk dh ryuk e mPprj ek=k e dljjk/kh x.k gkr gA igkMh dy %oh : ik{k% d Qy d j l d Loik= eY;kdu l ;g Li"V gvk fd bue cMh vkr & eyk'k; d dlj dh dcf'kdkvk ,pVh 29 dk fujk/k dju dh mPprj {kerk gkrh g %fp= 29%A

ryuh; ,pVh 29 o'kØe dcf'kdk, %0µxke@fe-fy-%



igkMh dy d Qy j l l mipkfjr ,pVh 29



fp= 29- igkMh dy d j l l cMh vkr dh dlj dcf'kdkvk d ipjHknu dk fujk/k %,pVh 29%

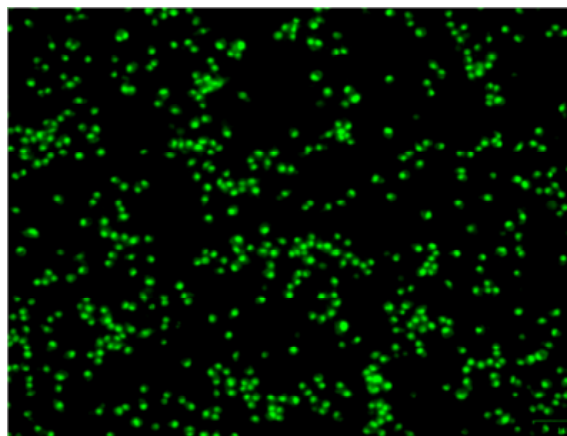
Hkk-d-v-i-&l h, l, l vkjvkb }kjk fodflr ck; kfeDl d io l/kkj %l {etfod dlkfV;e% dk l[kk ifrcy dh n'kk mRiUu dju d fy, dy d ik/kk dk dcf'kdk ;kf=fd;k l cpku d fy, mi;kx e



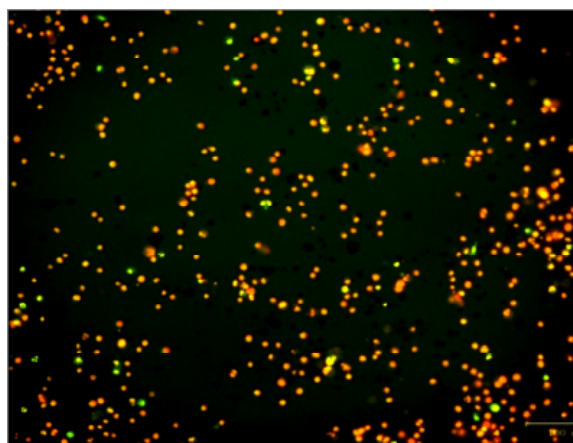
yk;k x;k rFkk bldh ryuk xj&mipkfjr enk e
dkf'kdk ;kf=dh o dk;k l dh xBA ck;kfeDI dy
dh okf.kfT;d fdLe j lFkyh dk l [k l gku okyh
{kfr l l jf{krr j [krk g vkj ,lk idk'k l'y" .k dk
cuk, j [kr g, o eDr ,feuk vEyk o vip;udkjh
'kdjvk d mRiknu d c<u d dkj.k gkrk gA bl h
idkj] yo.k ifrcy okyh enk %100 mMNCI½ e
ck;kfeDI l/kkj l xl fofue; ikpyk] eDr ,feuk
vEYkk o vip;udkjh 'kdjvk e of) gkrh g vkj
bld j}jk yo.k ifrcy e rhu l lrg ckn jgu ij Hkh
bl n'kk d vrxx ik/k thfor cu jgr gA

Lru d l j d k f'kdkvk d fo#) dy d fNy d dh
n {krk

dy d fNy d eFkkukfyd l rk %fdLe ulnu½
d ifrvkDI hdkjd] vk) jk/kh fØ;kvk o ikni j lk; uk
d eY;kdu d mnn'; l ;g v/; ;u fd;k x;kA
fNy d l r d eDr eyd Ldof tu x.kk dk eY;kdu
Mh i h ,p %1] 1&MkfQukby&2&fiØky gkbMk t kby½
rFkk ,Qvkj ,ih %Qfjd vip;udkjh ifrvkDI hdkjd
'kDr½ fof/k dk mi ;kx dj d fd;k x;kA Lru d k f'kdk
o'kØe % ,e l h ,Q&7½ dh vk) jk/kh fØ;k dk ,evhVh
rFkk bVhchvkj ,vk j tu eY;kdu fof/k l Kkr fd;k
x;kA ulnu fdLe d fNy d k Qfjd de dju e
vf/kd l {ke ik;k x;k %18-40 ifr'kr½ vkj ;g eDr
eyd dk fujk/k dju e Hkh 'kkfey g [55-10
%vkb l h %½A ikni j lk;u l c/kh vUo" .k e ¶yokukbM
v'k ulnu fdLe d fNy d l r e mPp ik, x, %51-
47 µ xk-@fe-fy-½A ;g bldh ifrvkDI hdkjd fØ;k
dk dkj .k gA bld vfrfjDr bu gku Lrudk f'kdkvk d
o'kØe e vk) dk lokPp fujk/k inf'kr fd;kA
ikl r ifj .kke k l ;g l >ko feyrk g fd dy %fdLe
ulnu½ d l r e lokPp ifrvkDI hdkjd ,o vkc njk/
kh fØ;k, gkrh g vkj bl idkj bldk mi ;kx fpfdr l h;
mnn'; l fd;k tk l drk g %fp= 30% A



ryuh;



120-6 µxk-@fe-fy- ulnu dk l r

fp= 30- ,e l h ,Q&7 d l j d k f'kdk dYpj o'kØek d
fu;=.k d l nHk e fdLe ulnu d fNy d l r dh n {krk

4-3-2 dy d Qyk d idu dk to j lk; ufoKku
rFkk Qy ,o i"i d mPp eY; d ;kfxdk dk
y {k .k&o .ku

xkM u;u dyk dh lL;&io fu/kkuh vk; e of)

xkM u;u fdLe d xPNk dk io ifjiDork %100
ifr'kr½ dh volFkk ij 12 ?kV d fy, 1µ fy-@fy-
dh l nrk ij 1&eFkkby l kbDyk i kiu %1&,e l h i h½
l /fer d j r g, mipkfjr fd;k x;kA mipkj d io
xPN d 'kh" k d igy nk dy d legk dk idu fn;k
x;k vkj m l d ckn bu legk dk gkFk l fudkydj
vyx dj fn;k x;k] rkfd ;g l fuf'pr gk l d fd
xPN ij h r jg id x, gA id g, dyk legk dk
dkVdj fudkyu d rRdky i'pkr xPNk dk ikyhFkhu

d Fkyk e 1&,elhih d lkFk j[kr g, /kfer fd;k x;k vkj ikyhFkhu d ok;#) Fkyk dk mi;kx djd xPNk dk ijh rjg <d fn;k x;k %fp= 31a% xkM u;u d ifjiDo xPNk dk ryuh; d : i e vklr ty l mipkfjr fd;k x;k rFkk mipkfjr o ryuh; xPNk dk idu fn;k x;kA ty l mipkfjr ryuh; xPNk dk jx vxy gh fnu l fo[kfMr gkuk vkjHk gk x;k vkj xPNk d 50 ifr'kr dyk leg nk fnuk e gh id x,A 1&,elhih l mipkfjr xkM u;u d xPN jx dk fo[kMu vkjHk g, fcuk gj cu jg rFkk 30 fnuk rd fcuk id g, cu jg %fp= 31b% bld i'pkr xPNk e ifjiDork n'kku okyk Hkjkiu] pVdu vkj fNyde njkj iMuk n[kk x;k %fp= 31c% ijh rjg ifjiDo xkM u;u d dyk d 1&,elhih d mipkj l gj dyk dh fu/kkuh vk; e 30 fnuk dh of) gbA



Fig. 31. Enhancement of pre harvest green life of bananas. a) Treatment of 1-MCP on full mature Grand Naine bunch, b) 1-MCP treated Grand Naine bunch after 30 days, c) Grand Naine bunches with peel splitting

rMkb io xkM u;u d dyk d ifjiDou 0;ogkj d eY;kdu l ;g irk pyk fd bfFkyhu d fNMdko d lkFk 1&,elhih l mipkfjr dy 3 fnuk e gh id tkr g yfdu 1 ,elhih l mipkfjr dyk d Lor% idu ij ijh rjg idue lkr fnu yr gA 1&,elhih l mipkfjr dyk d Lo; idu rFkk ij.k ifjiDou e bfFkyhu fudyu dh nj Øe'kh 2-32 vkj 2-46 ihih,e@?kVk Fkh tcf d ryuh; dyk e ;g 4-80 ihih,e@?kVk FkhA jx fo[kMu dh voLFkk d nkjku

;g Øe'kh 4-64 o 4-83 ihih,e@?kVk Fkh tcf d ifjiDou voLFkk 6 ij ryuh; dyk e ;g 6-92 ihih,e@?kVk FkhA 1&,elhih l mipkfjr dyk d Lo; ifjiDo gku o ifjr ifjiDou d nkjku ikyhxyDVjut fØ;k dk ekiu l mipkfjr dyk e ;g Øe'kh 0-047 vkj 0-051 bdkb fØ;k@xk- rktk Hkkj Fkh] tcf d ryuh; dyk e ;g 0-113 u/g FkhA jx fo[kMu dh voLFkk e ;g Øe'kh 0-40 o 0-44 u/g Fkh vkj ifjiDou voLFkk 6 ij ryuh; e ;g 0-71 u/g FkhA 1&,elhih l mipkfjr xkM u;u d dyk e bfFkyhu foekpu d fuEu Lrj vkj bl l lEc) e[; dkf'kd k fHkfÜk d focgyhdj.kdkjh , tkbej ikyhxyDVjku t d fuEu Lrj l ;g Li"V gkrk g fd 1&,elhih d mipkj l bfFkyhu dk l'y" k.k : d tkrk g vkj bld ifj.kkeLo: i , tkbeh fØ;kvk e Hkh deh vk tkrh gA 1&,elhih mipkfjr rMkb d io iou fdle d dyk e dy ?kyu'khy Bkl %Vh, l , l % vkj vEyrk dk fo'y" k.k Lor% ifjiDou o bfFkyhu l mipkj dju d ckn ifjr ifjiDou dh voLFkk d nkjku fd;k x;k vkj ; Øe'kh 20-14&23-4° fcd l ijl d Fk rFkk vEyrk 0-36&0-38 ifr'kr FkhA bl idkj] ; vuipkfjr ryuh; Qyk d leku gh Lohdk; Lrj ij FkA

dyk dk XykbIfed lpdkd

okf.kT;d dy d uk thui : ik d ifjiDou dh voLFkkvk 5 %ukd ij gj% rFkk 6 %ijh rjg ihy] [kk l voLFkk oky% d XykbIfed lpdkd %thvkb% dk fo'y" k.k Loik= LVkp ty vip;u fof/k l fd;k x;k ft ld i'pkr dy LVkp rFkk ifrjk/kh LVkp d , tkbe dk vkdyu o ,ekbykt vkj Xydkd dk vkdyu LVkp d ikpu] LVkp ty vip;u lpdkd oØ r;kj djd rFkk bl l thvkb dh x.kuk djd fd;k x;kA fo'y"kr fdLek e l ekFku dk thvkb lcl de vFkk ifjiDou dh 5 vkj 6 voLFkkvk ij 35 vkj 48 Fk tcf d djioYyh e voLFkkvk 5 vkj 6 ij ;g lokPp 52 vkj 68 Fk ft ld i'pkr u; iou e voLFkk 5 vkj 6 d nkjku thvkb dk Lrj 54



lkj.kh 16- Loik= LVkp ty vip;u }kjk eY;kfdr dy dh okf.kfT;d fdLek d XykbIfed lpdkd

fdLe	volFkk 5 ¼ukd ij gj½	volFkk 6 ¼ijh rjg ihy½
xkM u;u ¼, , , ½	50 \$3-5	64-0 \$ 4
jM cukuk ¼, , , ½	51\$2-5	66\$3-5
u; iou ¼,ch½	54\$3-5	67\$4
iou ¼, , ,ch½	52\$3	63\$3
j lFkyh ¼, , ,ch½	51\$2-5	62\$3-5
uUnu ¼, , ,ch½	38\$3	52\$3-5
ekFku ¼,chch½	35\$2	48\$3
djijoYyh ¼,chch½	52\$2-5	68\$3
m e ¼,chch½	52\$3	66\$3-5

vkj 67 Fkka xkM u;u dk thvkb bu nkuk volFkkvk ij 50 vkj 64 Fkka m|e vkj jM cukuk dk thvkb u; iou d leku Fkka Loik= fof/k l ijhf{kr l Hkh thui: ik e volFkk 5 ¼ukd ij gj jgu½ dk thvkb volFkk 6 ¼ijh rjg ihyk gku½ dh ryuk e vi{kdr fuEu Lrj dk Fkk ¼ lkj.kh 16 vkj fp= 32a o b½A



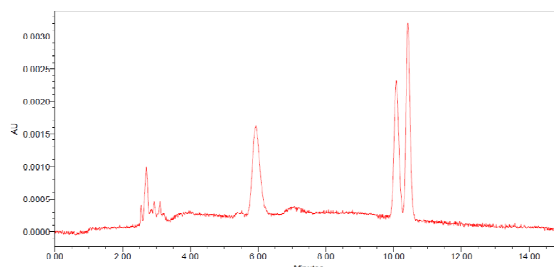
fp= 32a. okf.kfT;d fdLe fp= 32b- okf.kfT;d fdLe xkM u;u volFkk 5 ij xkM u;u volFkk 6 ij

dy d i"i lgi= d ,Fkfl ;kfuu dk y{k.k&o.ku

dy dh dy 11 okf.kfT;d fdLek dh uj i"i dfydvk d i"i lgi= e ,Fkfl ;kfuu jtd v'kk dk vkdyu fd;k x;kA uj i"i dfydk d Ng

lgi=k e vklr v'k u; iou e 57-8 fe-xk- vkj xkM u;u e 22-2 fe-xk- ifr 100 xk- jtd nu oky lgi= Fkka mPp mit'khy fdLek e l igkMh dy ¼57 fe-xk-½ iou ¼55½ j lFkyh ¼54-7½ ipunu ¼53½ vkj uUnu ¼52-5½ ie[k fdLe Fkka fofhku fdLek e uj i"i dfydk d lgi=k l iklr gku oky ,Fkfl ;kfuu dh l ;k fhkuu Fkh tk uUnu e lokPp nl rFkk ekFku vkj djijoYyh e ikp Fkka m|e igkMh dy rFkk ekFku e uj i"i dfydk d iFke lcl ckgjh lgi= l ekukefjd ,Fkfl ;kfuu dh mPprj ek=k iklr gb(ipunu) j lFkyh vkj djijoYyh e f}rh; lgi= e lokf/kd jtd iklr gvk rFkk u; iou xkM u;u vkj lkck vkj bld lkFk uUnu t l h fdLek d pkFk ikpo o NB lgi=k e lokPp ek=k e jtd ektn Fkka

rhu fdLek uker½ iou] u; iou vkj j lFkyh e lgi=k d ,Fkfl ;kfuu ;kfxdk d l?Vu dk fo'y" k.k ekudk dh ryuk e ,pih,ylh d }kjk fd;k x;kA



fp= 33- iou d uj i"i d lgi= e ,Fkfl ;kfuu ;kfxdk dk Økvkxke

iou lgi= dk ,Fkfl ;kfuu ikp ;kfxdk l cuk Fkk
 %fp= 33% ftud cu jgu dk le; 2-5] 2-7] 5-9] 10-
 0 vkj 10-4 feuV Fkk tk bl le; d nkjku Øe'k 3]
 7] 26] 28 vkj 36 ifr'kr cuk jgkA

,Fkfl ;kfuu jtdk dk dophdj.k

uUnu d i"i lgi=k l bFkuky % ty %1%1
 vk; ru@vk; ru% dk mi; kx dj d ,Fkfl ;kfuu jtd
 fudky x, rFkk uUnu d lgi=k l iklr ,Fkfl ;kfuu
 dk Hkkj 52 fe-xk-@100 xk- rktk Hkkj FkA fudky x,
 jtd dk fuEu ncko dh lknrk rFkk fgehdr 'k"du
 l p.k e ifjofrr fd;k x;kA ,Fkfl ;kfuu d bl
 p.k e 10%1 d vuikr e eYVMd l Vhu %20Mhb% feyk;k
 x;k rkfd vfre p.k iklr gk l dA bl p.k dk 400
 fe-xk- dh {kerk d ^0* vkdkj d dlly e dophdr

fd;k x;kA iR;d dlly e ,Fkfl ;kfuu dh ek=k 40
 fe-xk- Fkh %fp= 34%A



fp= 34- dy d i"i d lgi=k l eØk&dofpr ,Fkfl ;kfuu
 jtd



4.4 Qly Ij{kk

4.4-1 uk'kd thok d ic/k d fy, dy d ruk ?ku] vkfM; k i j l y k x h d k f y l d Q h j k e k u d h i g p k u dy d ruk ?ku d ok" idk dk l dyu o foyxu

dy d uj o eknk ?kuk }kjk NkM x, ok"i'khy inkFkk dk ,d= fd;k x;k rFkk mudk x l ØkeV k x k Q h @ e k l L i D V k e h V j h ¼ t h l h & , e , l ½ d }kjk fo'y" k . k f d ; k x ; k A i g p k u x , ; k f x d k d l ' y " k h l e : i k d k i j h { k . k L o i k = n ' k k d v r x r f d ; k x ; k A i f j . k k e k l f o M V u y t o e Y ; k d u e d N j l k ; u k d k 30 i f r ' k r ? k u v k d " k . k n [k k x ; k A

ik"kd ikni ok" idk dk mi ; k x d j d d h V k d 0 ; o g k j d k e Y ; k d u

dy dh lonu'khy fdLek ¼ d j i j o Y y h] u U n u v k j i o u ½ l i k " k d i k n i o k " i d k d L o i k = e Y ; k d u d f y , t h l h & , e , l } k j k f o ' y " k . k f d ; k x ; k A l o n u ' k h y i k " k d i k / k k d o k " i d k [α & f i u h u] β & f i u h u] β & d f j ; k Q k b y h u v k j f y e k u h u ¼ 0-5 l 2 i f r ' k r ½] d d f = e , u k y k x l u j v k j e k n k e 10 & 30 i f r ' k r v k d " k . k n [k k x ; k t c f d d o y r u k Q n l 70 i f r ' k r v k d " k . k n [k k x ; k A [k r e f t u d f = e j l k ; u k d k f e y k & t y k d j i ; k x f d ; k x ; k m u l ? k u k d k v k d f " k r d j u e d k b l g k ; r k u g h f e y h A

dfj ; k e k u d k m i ; k x d j r g , d h V k d 0 ; o g k j d k e Y ; k d u

0-5 l 2 i f r ' k r d h l k n r k i j d f j ; k e k u ; k f x d k g D V u j 2 & f e F k k b y & 4 i V k u k y] g l V k f M d u j v k D V k f M d u j

l k j . k h 17- dy dh okf.kfT; d fdLe xkM u; u e LoLFk rFkk ekG l ifjr gku ij NkM x, ok" idk e f h k U u r k ,

ok" id ¼ dk ; k R e d l e g ½
dy d LoLFk ik/kk d fy, fof'k"V

ok" id ¼ dk ; k R e d l e g ½
ekG l l Øfer ik/kk e mifLFkr

, Y V h g k b M ¼ 2 ½] , Y d k y k b M ¼ 1 ½] f o " k e p f Ø r ; k f x d ¼ 1 ½]
, Y d k f u d v E y ¼ 1 ½] , e k b M ¼ 1 ½] o l k v E y ; h L V j ¼ , Q , b ¼ 1 ½]
L V j k b M ¼ 1 ½] b F k j ¼ 1 ½] l x / k h ; ¼ 7 ½] f Q u k y ¼ 1 ½] o l k v E y ¼ 3 ½]
l k b D y k , Y d u ¼ 2 ½] d k c k g k b M V ¼ 1 ½] , Y d u ¼ 3 ½] d k c k D t f y d
v E y ¼ 1 ½] Q F k y V ¼ 1 ½]

l k b D y k M h u ¼ 1 ½] l k b D y k , Y d u ¼ 2 ½] , Y d u ¼ 4 ½] ¶ ; e k j V ¼ 1 ½]
i k b j h M h u ¼ 1 ½] , Y d k b u ; h L V j d d k y j h u 0 ; R i U u ¼ 1 ½]

4 & b F k k b y , f l V k f Q u k u d L o i k = i j h { k . k e u j v k j e k n k d c h p 20 & 40 i f r ' k r v k d " k . k f j d k M f d ; k x ; k r F k k v f / k d v k d " k . k e k n k r u k ? k u e i k ; k x ; k A d y d r u k ? k u d k v k g o k u 0 ; o g k j t l v i u m n j d k f i N y V k x k r d i j h r j g Q y k n u k] , f V u k d k y x k r k j d i U u g k u k] v M f u { k i d d k c k g j f u d y u k f o ' k " k : i l n [k x , A r F k k f i] m i j k D r ; k f x d k l [k r e ? k u v k d f " k r u g h g , A

LoLFk rFkk ekG l l Øfer ik/kk l ok" idk dk l dyu

dy dh okf.kfT; d fdLe xkM u; u d LoLFk rFkk ekG l l Øfer ik/kk l ok" id l d f y r f d , x , v k j m u d k f o ' y " k . k t h l h @ , e , l d } k j k f d ; k x ; k A i f j . k k e k l ; g L i " V g v k f d r y u h ; i k / k k e 16 d k ; k R e d l e g k d v r x r v k u o k y 28 ; k f x d r F k k e k G l l Øfer ik/kk e 11 d k ; k R e d l e g k d v r x r v k u o k y 24 ; k f x d N k M x , o k " i d k e e k t n F k A v / ; ; u k l ; g l d r f e y k f d L o L F k i k / k k v k j e k G l l Øfer ik/kk l N k M x , o k " i d k e Ø e ' k h 11 d k ; k R e d l e g r F k k i k p d k ; k R e d l e g l e k u ; F k A b l v / ; ; u e l x / k h ; ; k f x d k o ' k k d H k { k . k } k j k i f j r i k n i o k " i d k d h v f / k d l [; k f j d k M d h x b ¼ l k j . k h 17 ½ A

¶ ; t f j d e > k u l l Øfer t u u n 0 ; d [k r e d y d ? k u d l Ø e . k d k i ; o { k . k

¶ ; t f j e e > k u j k x l x L r [k r e m x k , x , E ; l k t u u n 0 ; e d y d ? k u d k l Ø e . k f j d k M f d ; k x ; k A i f j . k k e k l ; g l d r f e y k f d ¶ ; t f j ; e > k u j k x d d k j . k d y e r u d ? k u ¼ v k f M ; k i k j l

ykxhd/fy/½ IØe.k d dkj.k ik/k d Nne ru dk vk/kkj QV tkrk gA dy 315 ifof"V;k e ru d ?ku dk IØe.k n[kk x;k tcfid idn ?ku %dkLekikykbV/ /kfMM/½ dk IØe.k 315 ifof"V;k e I doy 163 ifof"V;k e gh fjdkM fd;k x;kA lkekU; : i I e>ku I IØfer ik/k ruk ?ku d IØe.k d dkj.k ik/ k d vk/kkj; Hkkx d QVu d ifj.kkeLo: i ik/k dh eR; gk tkrh gA

¶;tfj;e e>ku I IØfer rFkk LoLFk ik/kk I ok"idd dk ldyu o mudk fo'y"k.k

okf.kfT;d fdLe u; iou d LoLFk rFkk e>ku I IØfer ik/kk d ok"idd ,d= fd, x, vkj mudk fo'y"k.k fd;k x;kA ifj.kkek I ;g fjdkM fd;k x;k fd ryuh; ik/kk e 26 dk;kRed legk d vrxx vku oky 58 ;kfxd rFkk e>ku jkx I IØfer ik/kk d i=kPNn e 22 dk;kRed legk d vrxx vku oky 51 ;kfxd FkA lkyg ;kfxd LoLFk rFkk e>ku I IØfer] nkuk idkj d dy d ik/kk e FkA fuEu dk;kRed leg ,dek= : i I e>ku I IØfer i=kPNn e ektn Fk % ,YMHgkbM %½] MkbdkckekbM %½ vkj olk vEy ;hLVj % ,Q,b % 9% LoLFk ik/k d i=kPNn e ektn ;kfxd g % ,Ydkuku %½] ,Ydu %½] ,feuk vEy %½] ¶ykjhu 0; RiUu %½ vkj ckbQukby %½A

4-4-2 Hkkjr e dyk vkj lyVu e uk'kdtho ekufp=.k

dy d dhVv vkj mud ikdfrd 'k=vk dk ,df=r dju d fy, ikYykp] FkkfM;kdfMl; vkj fudV d {k=k %rfey ukM% vkj ikydKM %djj% e i{k= lo{k.k fd, x,A dy d dhVuk'kd thok] mud ikdfrd 'k=vk rFkk dyk ikfjLFkfrd i.kkyh I lEc) vU; dhVv d lnhk lyD'ku dk fofHkUu Hkxifdy LFkkuk I iklr fd, x, ueuk dk 'kkfey djr g, vkj vf/kd I 'kDr cuk;k x;kA dkQhu D; ih],Y;ykc/ E; Ih vkj cf/lyVv IcdkLVvV I lhvk1 thu dk

vuØfer fd;k x;kA mUkj ioh Hkkjr I Qy dk fNrjk nu oky Hkx d ldy d vkf.od y{k.k&o.ku I de I de nk itkfr;k uker% ,ØfiEiyk itkfr ,uvkj- ukbxkLD;fV/ %dejku% dyk Ldhij d ijtho;kHk % ,fj;kukVv Vku/½] ,d u, ekbefjM vM ijtho;kHk] ,ukxI itkfr %ef.kij I½ dh mifLFkfr dk ldr feyk vkj bld lFk gh ylfax erd.k I ,fjFkey/ iful %rfey ukM I½ dh Hkh igpku dh xbA dy dh dVfd;k] Qy d ehyh erd.k] tM d ehyh erdM vkj ldy d ijtho;kHk vkj ijHk{k;k] nkuk dk igyh ckj iy[ku fd;k x;kA vkyu eMk/ k] vkyifjfluh vkj dkQu D; ih lfr dy d xk.k uk'kdthok d u, ijtho;kHk dh igpku dh xbA gky gh e fjikV fd, x, ,d vkØked uk'kdthoj : ck t Likbjfyx lQn eD[kh] ,Y;jkfmD/ :fx;kijdyV/ %gfelVjk % ,y;kjfmMh% dh mld vkj vf/kd Qyko d fy, fuxjkuh dh xbA ;g fuxjkuh rfey ukM e ikYykp rFkk vfy;kjuxj d vkI&ikI dh xb rFkk dy ij bldh xgurk dh lhek dk bl o"k fiNy o"k dh ryuk e vf/kd ik;k x;kA ,d fon'kh ijtho;kHk] ,dkfI;k xvkMyk; ih



fp= 35a- ylfax erd.k ij ,ukx/



fp= 35b- dy dh lQn eD[kh



foXxh; kuh ¼gkbeukIVjk ¼, QyhfuMh½ dk 80 ifr'kr
ijthfork rd vR;f/kd lfØ; ik;k x;k rFkk rhu
dkdhufyM ijHk{kh}, fD lUkLdkbEu l iVVk : fM;kgH
Ldkbeul lfdQkfel vkj ,uXybl dKMKuh dk lQn
eD[kh dk Hk{k.k djr g, ik;k x;kA dy d
dhVuk'kd thok mud }kjk gku okyh {kfr d y{k.kk
rFkk mud ikdfrd 'k=vk d 1000 l vf/kd mPp
jtY; 'ku oky jxhu fp=k d l kFk ,d QkVx xyjh
r;kj dh xb rkfd vul/kkudrkvk ,o i{k= dfe;k
}kjk dhVuk'kd thok dk n[kdj igpkuu e vk l kuh
gk ¼fp= 35a vkj b½A

4-4-3 dy d dodh; rFkk thokf.od jkxk ij
vUo"K.k vkj mudk ic/k

dodh; ekbflfy;e d dPp Mh,u, l ekbdKLQjyk
b;E; lh rFkk yEi fof/k }kjk b;E; lh iÜkh /kCck
Årdk dh igpku

b;E; lh iÜkh/kCck jkxtud d funku d fy, Mh,u,
d foyxu dh fofjr ,o lLrh fof/k

fofHkUu thukeh legk d vrxx vku okyh dy
dh fofHkUu fdLek uker½ j lFkyh ¼, ,ch½ xkM u;u
¼, , ¼ vkj ekFku ¼, chch½ d iÜkh /kCck Årdk l
dPp Mh,u, foyfxr fd;k x;kA bld fy, 5 feuV
rd 650 l- ij Å"ekf;r iÜkh d p.k d fu"d"K.k cQj
dh ikp fe-fy- ek=k feykb xBA 7-5 M ikVf'k;e
, f lV d 0-5 vk; ru vkj 100 ifr'kr vkb l kikiuky
d 0-7 ifr'kr vk; ru dk feyk dj vo{kfir Mh,u,
iklr fd;k x;kA 5 feuV d i'pkr Mh,u, dk
vidUnhdj.k }kjk iu½ vo{kfir fd;k x;kA iklr
Mh,u, dh xfvdkvk e 70 ifr'kr bFkuky Fkk ft l
Vhb cQj e iu½ fuyfcr fd;k x;kA Mh,u, d
fu"d"K.k e doy nk ?kV dk le; yxk tcf d ih l hvkj
fo'y"K.k d fy, Mh,u, d foyxu dh l keku; fof/k
e 18 ?kV dk le; yxrk gA ;g fof/k dodh;
ekbflfy;e l Mh,u, dk foyfxr dju d fy, Hkh
bLreky dh tk l drh gA

yEi fof/k }kjk b;E; lh iÜkh /kCck jkx tud d
funku d fy, dodh; ekbflfy;e vkj iÜkh /kCck
Årdk d dPp Mh,u, dk lR;kiu

lØfer ifÜk;k d Årdk vkj ekbflfy;e l
fudky x, dPp Mh,u, dk lR;kiu yEi fof/k l
fd;k x;kA y{; jkxtud dk fof'k"V vko/ku dPp
Mh,u, ;Dr ufydkvk e ldkjRed ifrfØ;k d ek/
;e l fd;k x;kA

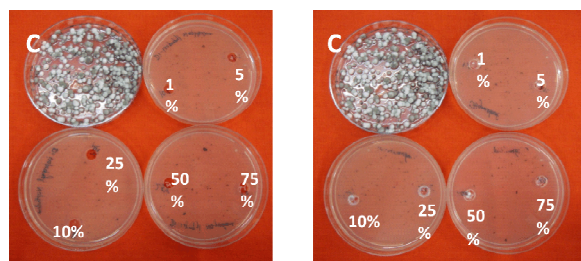
ekbdKLQhyyk itkfr;k l ?kfu"B : i l lcf/kr
rFkk mud Mh,u, feJ.kk dk mi;kx djd yEi
fof/k dh fof'k"Vrk dk ijh{k.k

yEi ikbej dh fof'k"Vrk dk ijh{k.k
ekbdKLQhyyk itkfr [,e- fQftufl l ¼ l [;k e 10½
vkj ,e- E; l hdkyk ¼ l [;k e 10½ vkj dodh;
jkxtud mRiUu dju oky 17 vU; iÜkh /kCck jkxtudk
dk mi;kx djr g, fd;k x;kA bld ifj.kkeLo : i
doy ,e- b;E; lh d Mh,u, dk gh vko/ku gvk
ft l d dkj.k yEi e vkof/kr mRikn dk jx gydk
ihyk gjk gk x;k rFkk ty byDVkQkjfl l e yMj
Mh,u, iVu mRiUu gvkA yEi fof/k dh fof'k"Vrk dh
tkp Mh,u, d fofHkUu feJ.kk ¼, ,e- b;E; lh \$,e-
E; l hdkyk] ,e- fQftufl l \$,e- E; l hdkyk] ,e-
b;E; lh \$,e- fQftufl l vkj ,e- b;E; lh \$,e-
fQftufl l \$,e- E; l hdkyk½ dk mi;kx djd dh
xb ft l l ;g Li"V gvk fd yEi ikbej ,e- b;E; lh
d ifrvR;f/kd fof'k"V FkA

b;E; lh iÜkh /kCck jkx d fo#) iHkkoh to fu;=d
, tV k l to lfØ; ;kfxdk dk foyxu vkj mudh
igpku

ifufly;e fiufQye ¼12 Mh,Q½ vkj
,efj l Yyk fuMyk l ¼9 Mh,Q½ d dy ,Fkkby ,f lV
dPp l r ¼b, l hb½ Vh,y l h d ek/;e l foyfxr fd,
x, rFkk 18 ;kfxdk dk igpkuk x;k rFkk mudk
Loik= eY;kdu fd;k x;k rFkk ,e- b;E; lh d
fo#) mudh ifrdodh; lfØ;rk dk irk yxk;k tk

Ida ifj.kkek l ;g ldr feyk fd 18 ;kfxdk e l
doy 7 ;kfxd gh ifrdodh; fl) gkr gA bld
lkFk gh bu 7 ;kfxdk dk thlh&,e, l d ek/e l
fo'y" k. k fd; k x; k vkj mue l Hkh doy nk ;kfxdk
e l Hkh l knrkvk 0-01] 0-05] 0-25 vkj 0-5 xke@fe-
fy-½ ij ,e- b;E; l h jkxtud d ekblfy; k dk 100
ifr'kr fujk/k n[kk x; kA bl h idkj] b- fuMyk l
9Mh, Q½ l foyfxr ;kfxdk e 0-25 vkj 0-5 xk-@fe-
fy- l knrk ij 100 ifr'kr fujk/k inf'kr gvkA rFkfi
l Hkh rhu ;kfxdk e Loik= n'kk d vrxr cht k. k
vdj. k dk 100 ifr'kr fujk/k fjdKM fd; k x; k fp= 36%A

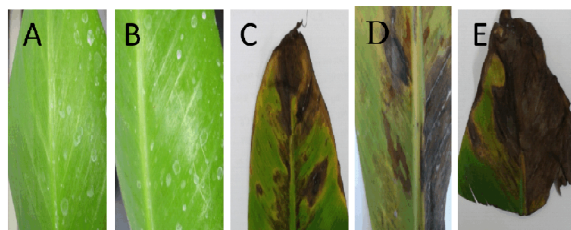


fp= 36- ekbdLQh jyk b;E; l h d ekblfy; k dh of) ij
fofHkUu tolfØ; ;kfxdk dk iHkko(A. ih- fiukfQye l
foyfxr ,d ie[k ;kfxd d jkjk b- b;E; l h d ekblfy; k
dh of) dk fujk/k(B. ,ejhlyk fuMyk l l foyfxr ie[k
;kfxd d jkjk ,e- b;E; l h d ekblfy; k dh of) dk
fujk/k

thlh&,e, l d ek/e l ,e- b;E; l h jkxtud
l foyfxr fo"ky ;kfxdk dk y{k.k&o.ku

Vh, y l h dk mi ;kx dj d ,e- b;E; l h d dYpj
fQYV l bFkby , flVW dk dPpk l r %b, l h b½
fudkyk x; k vkj m l vkf'kd : i l 'k) fd; k x; kA
Vh, y l h e fn[kkb fn, /kCck ¼7 /kCck½ dk vyx&vyx
fu"df"kr fd; k x; k rFk ,e- b;E; l h dk mi ;kx
dj d Loik= to eY; kdu ij h{k. k fd; k x; kA ifj.kkek
l ;g ldr feyk fd 7 ifV; k e l doy ,d iVh
l Ård {k; gkrk g ¼Vh1¼A vkfo" k Vh1 dk thlh&,e, l
d ek/e l fo'y" k. k fd; k x; k ft l d ifj.kkeLo : i
rhu fofHkUu ;kfxd uker% VkbefkD l h fIyoku
Dohu t jhu] p-ct kDohuku MkbvkD l h e dh igpku gBA

bue l doy nk ;kfxdk uker% Dohu t jhu rFk p-
ct hDohuku MkbvkD l h e ¼txyku d leku½ 100 ihih, e
ij 10 fe-eh- 0; k l dk Ård {k; gvk tcf d 72 ?kV
d i'pkr 50 ihih, e ij 27 fe-eh- 0; k l dk Ård {k;
ik; k x; k fp= 37½A



fp= 37- fNMdko d 15 fnu ckn dy dh ifÜk; k ij ,e-
b;E; l h l iklr fo"ky ;kfxdk dk iHkko(A. ryuh;) B.
Mh, e, l vkj C. tXyku & 50 ihih, e] D. Dohu t jhu & 100
ihih, e] E. p-ct kDohuku MkbvkD l u ¼ihchMh½ & 50 ihih, e

dy dh okf.kfT; d fdLe ulnu e ukd rFk MBy
lMu jkx mRiUu dju oky jkxtud dk foyxu
vkj y{k.k&o.ku

dy d Qy ¼okf.kfT; d fdLe ulnu½ e Qy dh
ukd rFk MBy lMu l lØfer Hkxk l rhu dodh;
foyxd ¼Vhih½ Vhvkj vkj ihvkj½ foyfxr fd, x, A
bu dodh; foyxd dk vkbVh, l & vkjMh, u, vuØe
fo'y" k. k d jkjk igpku dh xBA nk foyxd ¼Vhih
vkj ihvkj½ u, idkj d dodk fI; tfj; e
DyebMkLikje d u, idkj d vrxr vkr g ¼Hkkr
e fjiV ugh½ rFk foyxd ¼ihvkj½ yfI; kfmlykfm; k
fFk; kckeh d vrxr vkrk gA

fI; tfj; e DyebMkLikje ¼Vhih½ ihvkj½ d bu
Øek dk tfroÜkh; fo'y" k. k , ulchvk MVkcl l
iklr fd, x, Øek d lkFk lekurk d vk/kkj ij
fd; k x; k ft l l Li"V gvk fd , Q- DyebMkLikje
d nk Øe ¼Vhih½ ihvkj½ e m l h leg e leghdj. k d
jkjk , Q- DyebMkLikje d ,d vU; Øe l 99-9
ifr'kr lexrk gkrh gA



dy e 'kh" k rFkk MBy IMu mRiUu dju oky
fj; tfj; e DyekbMkLikje d fo#) fofHkUu
doduf'k; k dk Loik= eY; kdu

, Q- DyekbMkLikje d fo#) Ng fofHkUu
doduf'k; k [Vcdkukt ky \$ Vkbjykd I hLVkfcu %ufVo] dkdMf te] fFk; kQuV eFkby %jkd] MkbQukd kuk t ky
%Ldkj] ikfidkukt ky %fVYV% vkj I hvk I h %QkbVkyku] dk eY; kdu ikp fofHkUu I knrkvk %0-05] 0-1] 0-25] 0-5 vkj 1 ifr'kr % ij [kk | inkFk e fo" k feyku dh
rduhd }kjk fd; k x; kA ijhf{kr I Hkh doduf'k; k I jkxtud , Q- DyekbMkLikje d ekb lfy; k dh of) dk 72-2 I 100 ifr'kr rd fujk/k gvkA rFkfi] rhu doduf'k; k ufoV] dkdM the vkj ikfidkukt ky
%fVYV% e ijhf{kr I Hkh I knrkvk ij jkxtud , Q- DyekbMkLikje d ekb lfy; k dh of) dk 100 ifr'kr fujk/k fjdkM fd; k x; kA

dy e 'kh" k IMu I Øe. k mRiUu dju oky
yf/; kfmlykfm; k fFk; kckeh d fo#) fofHkUu
doduf'k; k dk Loik= eY; kdu

[kk | inkFk e fo" k feyku dh rduhd }kjk 5
fofHkUu I knrkvk %0-05] 0-1] 0-25] 0-5 vkj 1 ifr'kr % ij , y- fFk; kckeh d fo#) Ng fofHkUu doduf'k; k
[Vcdkukt ky \$ Vkbjykd I hLVkfcu %ufVo] dkdMf te] fFk; kQuV eFkby %jkd] MkbQukd kuk t ky %Ldkj] ikfidkukt ky
%fVYV% vkj I hvk I h %QkbVkyku] dk eY; kdu fd; k x; k ft I d ifj. kkeLo: i jkxtud d ekb lfy; k dh of) e 38-8 I 100 ifr'kr d chp
fujk/k gvkA rFkfi] nk doduf'k; k uker % dkdM the vkj fFk; kQuV eFkby %jkd] I ekb lfy; k dh of) dk 100 ifr'kr fujk/k fjdkM fd; k x; kA

4-4-4 dy d idnk dk lo{k. k] grfoKku vkj
ic/

fr : fPpjkiYyh rFkk Fkuh %rfey ukM] vurijke
%vk/ in'k % vkj gxyh , o ukfn; k % if'pe cxky % e dy d idn IMu ij , d lo{k. k fd; k x; k ft I I

; g irk pyk fd dy dh iou] jM cukuk] xkM u; u
rFkk u; iou fdLek e jkx dk 8&10 ifr'kr idki
FkA ; g idki Ård lo/ku }kjk r; kj fd, x, dy
dh ik/ k %okf. kT; d fdLe xkM u; u % e vf/ k d FkA
ik/ k dh vxrh voLFk % jkikb d 2&5 ekg ckn % ; g
idki n[k x; kA idn IMu jkxtud d 36 fofHkUu
foyxd foyfxr fd, x, rFkk dYpj k dk Xyh I jky
LVkd r; kj fd; k x; k vkj mI 80° I- rkieku ij
HkMkfjr fd; k x; kA

vyk ij dyk I h; tkeuh iDVV eY; kdu rFkk
to eY; kdu dk mi; kx dj d foyxd d y{k. k&o. ku
I ; g inf'kr gvk fd ; foyxd vR; f/ k d mx Fk
rFkk , d foyxd u Ård lof/ kr dy dh okf. kT; d
fdLe u; iou e fof' k" V idkj d idn IMu @ 'kh" k
IMu d y{k. k mRiUu fd, Fk % fp= 38a vkj b% A dy
d tM {k= dh enk d ueuk I ik/ k dh of) dk iof/
kr dju oky 15 thokf. od foyxd foyfxr fd,
x, A



fp= 38a. Vh I h u; iou d fp= 38b. v& I jkfir LoLFk
ik/ k e 0; Dr thokf. od idn ik/ k
IMu d y{k. k

4-4-5 dy d fo"kk. kvk d ic/ k d fy,
ik" d&fo"kk. k&okgd& i; koj. k vrj fØ; kvk rFkk
RNAi dk le> u d fy, vkf. od ; fDr; k

mÜkj&ioh iorh; foyxd I dy d lgi= d
fpÜkh fo"kk. k %BBrMV % d I Ei. k thuke dh ryuk rhu
vU; foyxd I dh xb rFkk tkfroÜkh; o{k e igpkuu
; kx; fofo/ krk n[kh xBA fo' y" k. k fd, x, 49 BB rMV

foyxdk e l foyxd Vh,u 11 u lkr l ;kx igpku ,Yxfjne d }kjk iul;kx dk iek.k inf'kr fd;kA BBrMV dk cht l lpkfjr gkr g, ik;k x;k rFkk bldh ifV vkjVh&ihlhv kj o xkbx&vkmV ijh{k.k dk mi;kx djd igpku djr g, o fo"kk.k dk ek=kRed fu/kkj.k djr g, dh xba fo"kk.k dh ifr;k dk cht d fofHkUu Hkkxk e ek=kRed fu/kkj.k fd;k x;kA bld fy, okLrfod le; ihlhv kj dk i;kx fd;k x;k ftle mue fo"kk.k dh 27&631 ifr;k n[kh xba yl fox erd.k LVQfuV/ Vkbfi dk vkf.od iek.k d vk/kkj ij BBrMV dk ,d vrfjDr okgd fl) gvkA E; /k vkukVh e lh,eoh dh mifLFkr igyh ckj fjdkM dh xb rFkk bldh ifV ,ykbt kj ihlhv kj vkj jkxtudrk ijh{k.k d }kjk dh xb ftle fudkfVuk itkfr;k d ;kf=d j l lki dk mi;kx fd;k x;kA ,eohv kj&RNAi vkj g;jfiu&j i%chchVhoh% dklVDV dk mi;kx djd igkMh dy %oh: ik{k}h , ,ch% d 22 l;VfVo ijkthuh o'køe fodflr fd, x, rFkk mUg ijkthuh tky?kj e jkik x;kA blh, l 0;RiUu dy d xfpNr pM fo"kk.k %chchVhoh% l eDr igkMh dy d ik/k u iMh dh nljh Qly e ?kudnk l of) iklr ik/kk dh ryuk e of) rFkk mit lc/kh ikpyk d ekey e mYy[kuh; vrj inf'kr fd;kA rFkfi] ;g Ård lo/ku }kjk mxk, x, ik/kk d led{k Fkka nlh dyk d /kkjh elj fo"kk.k %ch, l,eokboh% l eDr J"B Ård lo/ku l 0;RiUu dy dh iou fdle d ik/kk ij ikFkfed i{k=eY;kdu d vdkMk e ?kudnk l mxk, x, ik/kk dh ryuk e of) rFkk mit lc/kh ikpyk e mYy[kuh; vrj inf'kr gvkA chchVhoh d fo#) ifrj/k d fy, dy dh ipkl f}xf.kr tuun0; ifofV;k %,, vkj chch% dh NVkb ?kudn }kjk mxk, x, ik/kk d lFk dh xb rFkk fo"kk.k l fØ; ekgvk dk mi;kx djd bl fo"kk.k dk ik/kk e lpkfjr fd;k x;kA igkMh dy rFkk xkM u;u ik/kk lfr 12 f}xf.kr ifofV;k e vkt dh rkjh[k rd ; y{k.k 0;Dr g, gA

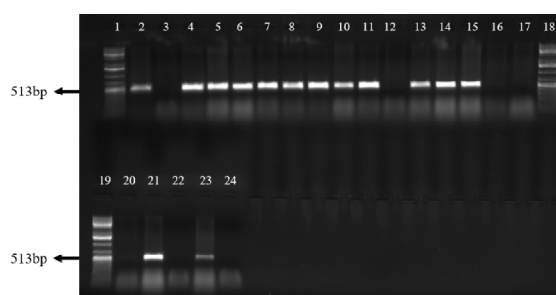
4-4-6 dy e ik"kd&dyk d xfpNr pM fo"kk.k %chchVhoh% vrjfØ;k dk ikfV;keh fo'y"kk.

ik"kd rFkk fo"kk.k dh ikVhu&ikVhu vrjfØ;k,

bu&lfydk fo'y"kk d ek/;e l Ng eIF4E dh okf.kfT;d fdle uUnu e igpku dh xba thu fof'kV ikbej fMtkbu fd, x, rFkk ihlhv kj n'kkvk dk ekudhdj.k fd;k x;kA okf.kfT;d fdle uUnu l iklr lHkh Ng eIF4E thu] thu fof'kV ikbej d }kjk vkof/kr fd, x,) Dyku fd, x, rFkk Øec) dju d i'pkr mUg ,ulhchvkb tucd e ilrr fd;k x;kA bld i'pkr bu Ng thuk dk ykl rFkk f'kd kj okgd e mi DYkku fd;k x;k rkd ;hLV i.kkyh e BBrMV d vPg d lFk bu thuk dh iR;{k vrjfØ;k dk v/;;u fd;k tk l dA

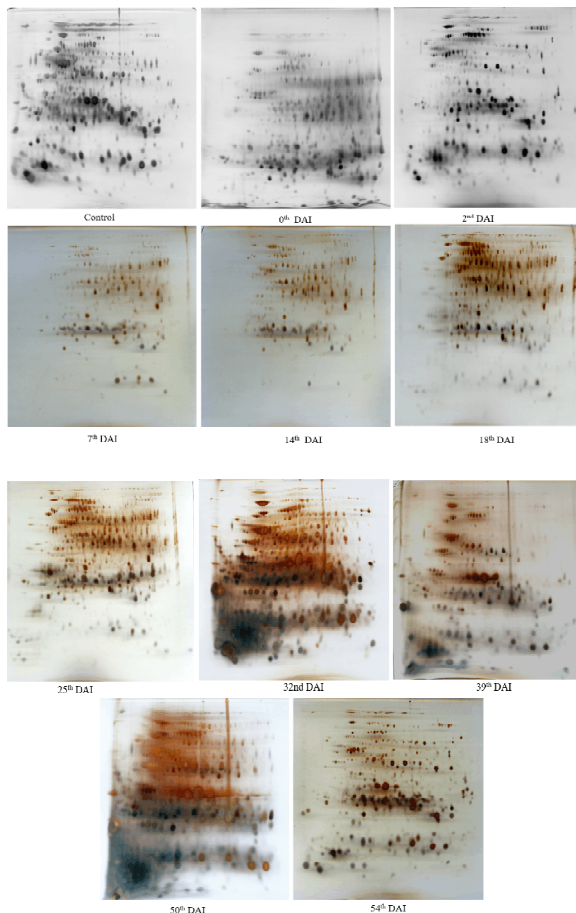
igkMh dy e chchVhoh d lØe.kdkjh pØ dk le;c) v/;;u

igkMh dy e chchVhoh lØe.k pØ dk v/;;u dju d fy, fo"kk.k mx ekgvk dk igkMh dy d f}rh;d Lrj ij dBkj fd, x, ik/kk dk vkgkj f[kyk;k x;kA 30 fnu d Hkj.k d i'pkr fo"kk.k mx ekg l lØfer iÜkh d Ård ,d= fd, x, vkj mudk 10 fofHkUu le; vrjkyk ij ikVhu e ifjoru



fp= 39- igkMh dy d ik/kk e chchVhoh lØe.k dh ihlhv kj ifV

chchVhoh dop ikVhu thu e vkof/kr [kM %ueu drkj@LrHk fof/k }kjk iy fd, x, g%a yu&1] 18 o 19 = 1 kb Mh,u, yMj rFkk %,echvkb QeUVk l % yu 2&11 = vkj1&vkj10 ueu(yu 12&17] 20&24 = lh1&lh9 ueu



fp= 40- fofHkUu le; vrjkyk ij chciVhoh d ekj }kjk lji d i'pkr igkMh dy d ik/kk d jtr jftr ty %ryuh; lØe.k d 'ku;] nli] 7o] 14o] 18o] 25o] 32o] 39o] 50o vkj 54o fnu ckn%

dh nf"V l fo'y".k.k fd;k x;kA ikVhuk dk vkbI kbyDVkQkjfl l }kjk vkbiht h ifV; k dk mi; kx djd vyx fd;k x;kA bUg vkbb, Q 100 vkbI kbyfDVd QkdfI x bdk & gk; Qj? e l ikfnr fd;k x;k ft l d i'pkr ikVhu dk f}rh; vk; keh foyxu fd;k x;k; k %fp= 39 vkj 40%A

4-4-7 E; l k l=dfe; k dh fofHkUu t hofHkUu 0; ogkj] vrjfo; kvk vkj mud ic/ k ij vUo".k. l=dfe; k d fy, dy dk lo{k.k vkj ueukdj.k

dyk dh [krh oky fofHkUu {k=k l , d= fd, x, enk vkj tM d ueuk l dk l jxkM vkj dUukjk %djoy½ e dMyhdKj l=dfe; k %gydkVkybd l

i t kfr; k½(eYykije fty %djoy½ e tM e ?kko dju oky l=dfe; k % ifVyd l i t kfr; k½ vjkHkkoH %dukVd½(dkoj] vurjij %vk/k in'k½(xkunoh %xtjkr½(iVdkij %vkfM'kk½ e tMxB l=dfe; k %eykBMxkbui t kfr; k½ dh mPp l e f"V; k dh mifLFkr dk irk pykA

dy d l=dfe; k ij vkf.od fofHkUu l c/kh v/; ; u

dy 31 l=dfe foyxdk l l=dfe Mh, u, fu"df"kr fd; k x; k ft le tMxB l=dfe %11½] dMyhdKj l=dfe %10½] tM e ?kko dju oky l=dfe %4½] xn d vkdkj d l=dfe %2½ vkj dhV jkxtud l=dfe %bi h, u½ %3½ ik, x, A crjrhc ikbejk d fofHkUu lV d l kFk ih l hvkj }kjk vko/ku fd; k x; k rFk 40 l=dfe foyxdk d Mh, u, ueuk dk vuØe.k fd; k x; kA l=g l=dfe foyxdk d vuØe , ul hchvkb dk iLrr fd, x, rFk thud ifof"V l [; k, iklr dh xb % l k j.kh 20½A

dy dh okf.kfT; d fdLe uUnu e tM e ?kko dju oky l=dfe] jfVyd l dkQhb rFk dhV jkxtud l=dfe] gVjkjfcMfV l bfmDk d chip vrjfo; k

tM e ?kko dju oky l=dfe] ifVyd l dkQhb rFk dhV jkxtud l=dfe] gVjkjfcMfV l bfmDk dk vyx&vyx vkj ijLij feyk d j l jfir fd; k x; kA ifj.kkek l ; g inf"kr gvk fd nkuk l=dfe; k d lfefyr l jki.k rFk vdy , p- bfmDk d l jki.k ij of) l c/kh ikpy xj l jfir ryuh; d cjkcy FkA tc , p- bfmDk dk i h- dkQhb d l kFk feyk&tyk mi; kx fd; k x; k rk l=dfe l e f"V e mYy [kuh; deh vkbA

tM e ?kko dju oky l=dfe] ifVyd l dkQhb d fo#) okuLifrd] to fu; =.k , tV k dk eY; kdu

vk'kk tud okuLifrd %Doj lVhu vkj ftEe d uukQkey'ku½ vkj to fu; =.k , tV k %VkbdkMek , Lijye] ifuf l fy; e ikbukfQye] VkbdkMek i t kfr] cfl y l i t kfr½ dk dy dh uUnu fdLe e tM e ?kko

lkj.kh 18- ,ulhchvkb e iLrr l=dfe foyxdk dh lph

d- l- LFku	ikbej	tu cd ifofV l-
tM e ?kko dju oky l=dfe %ifVyd l dkQb%		
1- Hkk-d-v-i-&,uvkj l hch] fr : fPpjkiYyh] rfey ukM	Mh3, & Mh3ch	,e,Q 996768
2- Fkuh] rfey ukM	Mh3, & Mh3ch	,e,h 020110
3- FkkfVV;ke] rfeyukM	Mh2, & Mh3ch	,e,p 087065
dMyh dk l=dfe %gfydkVkyd l eYVh l DV l%		
4- Fkuh] rfey ukM	Mh3, & Mh3ch	,e,Q 996772
5- FkkfVV;ke] rfey ukM	Mh3, & Mh3ch	,e,h 020141
6- ;jdkM] rfey ukM	Mh2, & Mh3ch	,e,p 087066
7- Fkuh] rfey ukM	Mh2, & Mh3ch	,e,p 087063
8- dk l jxkM] d j y	Mh2, & Mh3ch	,p,p 087064
9- cxy :] dukVd	Mh2, & Mh3ch	,e,p 084946
tMxkB l=dfe %eykbMkxkbu i tkfr%		
10- Hkk-d-v-i-&,uvkj l hch] fr : fPpjkiYyh] rfey ukM	Mh3, & Mh3ch	,e,h 020140
11- Fkuh] rfeyukM	Mh3, & Mh3ch	,e,h 022136
12- Fkuh] rfey ukM %eykbMkxkbu xfeuhdkyk%	Mh2, & Mh3ch	,e,p 087061
le d vdkj d l=dfe		
13- FkkfM;kudfM l b] rfey ukM	Mh2, & Mh3ch	,e,p 100897
jfCMfV l jbukb %b i h,u%		
14- Fkk;uj] fr : fPpjkiYyh] rfey ukM	Mh3, & Mh3ch	,e,Q 996767
LVbujuek fl ;kedk;kb %b i h,u%		
15- Fkk;uj] fr : fPpjkiYyh] rfey ukM	18, l & 28, l	,e,p 091330
16- i knkoj] fr : fPpjkiYyh] rfey ukM	18, l & 28, l	,e,p 091332
gVjkj fCMfV l bfMdk %b i h,u%		
17- Fkk;uj] fr : fPpjkiYyh] rfey ukM	VhMCY; 81 & ,ch28	,e,p 299879

dju oky l=dfe d fo#) ijh{k.k fd;k x;ka ifj.kkek l ;g inf'kr gvk fd cfly l itkfr l=dfe;k dh lefV dk de dju vkj ikni of) dk l/kkju e lokf/kd iHkkoh FkhA

tM xkB l=dfe] eykbMkxkbuh buDkXuhV d fo#) ifrjk/k d fy, dy d thui : ik dh NVkb

dy d uk vk'kk tud f}xf.kr vkj f=xf.kr thui : ik] uker% okf.kfT; d fdLe jk t % , , %] fi l kx tkjh cvk; k % , , %] ckb l k % , chch% ekukjft re % , , %] ikpk ckFkk cFkh l k % , chch% D; ck % , chch% du ck l h

% , , %] U; Vlkx % , chch% vkj , 'k ekFku % , chch% dh tM xkB l=dfe %eykbMkxkbu buDkXuhV d fo#) NVkb dh xBA ifj.kkek l ;g inf'kr gvk fd U; Vlkx vkj du cl h gYd ifrjk/kh FkA fi l kx tkjh cvk; k ?kko cuku oky l=dfe; k d , d ifrjk/kh l nHk thui : i d fy, vR; f/kd lonu'khy FkA

dy d ruk ?ku d fo#) dhV jkxtud l=dfe d foyxdk dk foyxu] igpku rFkk eY; kdu

Hkk-d-v-i-&,uvkj l hch d enk ueuk l pkj dhV jkxtud l=dfe %b i h,u% foyxd ik l r fd,



x,A vkf.od ekdjk dk mi ;kx djd mUg jfMfVI
jub] LVbuuek fI ;kedk ;kb %nk foyxdk% rFkk
gVjkjfMfVI bfMdk d : i e igpkuk x ;kA dy d
ru d ?ku d fxMkj ij vkj- jub Loik= Ijki.k d
rhI jfnu d i'pkr vkfM ;kikjI ykxhdkfyI e 100
ifr'kr eR ; fjdkM dh xBA bI Ijki dh nj 10]000
I=dfe@fxMkj FkhA bIh idkj] Ijki.k d 10 fnuk
i'pkr o ;Ld ?kuk dh 40 ifr'kr eR ; nj fjdkM dh
xBA ,p- bfMdk d InHk e Ijki.k d 48 ?kV ckn



fp= 41a gVjkjfMfVI bfMdk }kjk ekj x, dy d ru d
?ku d fxMkj d 'ko

fxMkj dh 100 ifr'kr eR ; nj fjdkM dh xb ft le
I=dfe ;k dh U ;ure Ief"V 250 I=dfe@fxMkj
Fkh] tcfd 10000 I=dfe@?ku dh U ;ure Ief"V I
Ijki.k d i'pkr o ;Ld ?kuk dh 100 ifr'kr eR ; nj
fjdkM dh xb %fp= 41a vkj b%A



fp= 41b gVjkjfMfVI bfMdk }kjk ekj x, o ;Ld ru d
?ku d 'ko

4-5 ckg; fuf/k Igk;rk iklr ifj;ktuk,

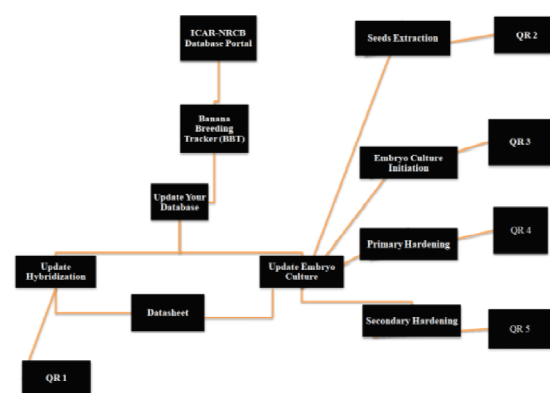
4-5-1 vkbvkbVh, & Ig;lxh ifj;ktuk % vYhdk d xV yDI {k= e NkVh tkr d fdI kuk d fy, dy dk I/kkj & ¶;tfj;e e>ku&ifrjk/kh fdLek d fodkI d }kjk dy dh mRikndrk c<kuk rFkk vYhdk d NkV tkrnkjk d I kFk ykHk dh Hkxhnhkjh ¼, I- mekj , I- ckfdd; jkf.k] ,e-, I- IjLorh vkj , - fr : bkukoy½

ik/k d fofHkUu Hkxk uker% cht] Hk.k vkj ijkj dh ukd dk fofHkUu lknrvk ij vjkbtfyu I mipkj djr g, chch] , , vkj ,ch ifof"V;k e Loik= cg cgx.krk dk i;kI fd;k x;k rkfd bud x.kI=k dk nxuk fd;k tk l dA Loik= cg cgx.krk d mi;kx d fy, dUuu ¼, ch½ idkj d blh, l dk fodkI fd;k x;k gA fi l kx vokd ¼, chch½ ifof"V;k dk fofHkUu ujtudk d I kFk ldfjr dj; k x;k vkj dy 456 cht iklr fd, x, A Hk-d-v-i-&, uvkj l hch e fodflr fo|eku ikp djijoYyh f=xf.krk dk fofHkUu f}xf.kr uj tudk I l djhdj.k dj; k x;k rFkk dy 400 cht iklr fd, x, A dk; idt ¼MCY; ih3½ dk mnn'; , Qvk/h ifrjk/kh vkf.od ekdj dk fodkI g ft l d fy, 130 ekufp= l ef"V;k dk Mh,u, fofyfxr fd;k x;k g rFkk bl ekdj v/; ;uk d fy, r;kj j[kk x;k gA MCY; ih5 dk mnn'; nkgj mnn'; d fi l kx vokd idkj dk i tuu MVkcl d mi;kx d ek/;e l I/kkj djuk gA bl mnn'; I dy dk i tuu Vdj fodflr fd;k x;k g rFkk i tuu vkdMk dk bl MVkcl e j[kk x;k g rkfd i tuu lpuk d fy, bl vkIkuh l iklr fd;k tk l dA

dyk i tuu Vdj ¼chchVh½

i tudk dk lfo/kk inku dju d fy, , d dyk i tuu Vdj ¼chchVh½ fodflr fd;k tk pdk g %fp= 42½ ft le pkj vkmVl k l lyVQkek t l wix.com] Google sheets. Jortform (<https://www.jortform.com>)

rFkk D;vkj&dkM tujVj dk lefdr fd;k x;k g tgg ituu lc/kh lpuk o x.ki: ih vkdMk dk ifof"V dj; k tk l drk gA chchVh e miyC/k djkb xb l Hkx lpuk dk Dohd jLiflo dkM %D;vkj½ d : i e dkM fd;k tk, xk ft l fodkM djd ituu lpuk dk D;vkj, l Lduj dk mi;kx djr g, fMdkMj d }kjk iklr fd;k tk l drk gA Hk-d-v-i-&, uvkj l hch }kjk fodflr chchVh dk mi;kx fd;k tk jgk g vkj bl l u, l dj o ekufp= l ef"V;k d fodkI e lfo/kk iklr gk jgh gA



fp= 42- MVkcl dh okLr jpuk

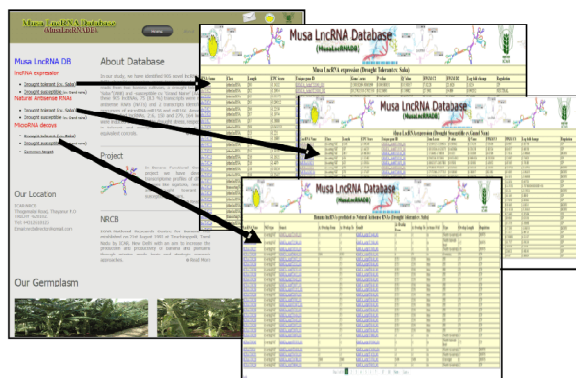
4-5-2 Qlyk e ijkthfu;k ij uVod ifj;ktuk & dyk dk; kRed thukfeDI ¼flxkVkd vkj l[kk ?kVd½ ¼, I- mekj , I- ckfdd; jkf.k] vkj- rxoy vkj ,e-, I- IjLorh½

dk; kRed thukfeDI

dy dh nk fdLek l vkj, u, & Øe jhM l d l[kk d ifr vufØ; k'khy ukoy VklfØIV l 8471 E; l k yk x uk u&dkfMx vkj, u, MVkcl ¼MusaLncRNADB½ d ek/;e l 905 u, IncRNAs fodflr fd, x, gA bl d l kFk gh l[kk lfg".k okf.kfT; d fdLe ^ l kck* ¼, chch½ vkj & lonh okf.kfT; d fdLe ^ xkM u; u* ¼, , , ½ dk Hkx mi;kx fd;k x;k gA ;g MVkcl , pVh, e, y] tok vkj ih, pi h dk mi;kx djd fodflr fd;k x;k g rFkk MVkcl IV dk mySQL MVkcl e HkMkfjr fd;k x;k gA ble nh?k&vdkfMr vkj, u, vfHkO; fDr] ikdfdr , fV l l vkj, u, rFkk



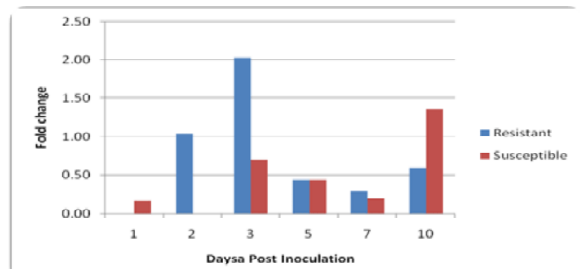
ekbØk vkj,u, fMdt gA bl idkj d fodYi bl MVkcl e miyCk dj, x, g ftul lp ckDI e Dojh Mkydj %LncRNA uke ;k thuke vkbMh½ [kk t dh tk ldrh g vkj ifj.kkek dk iklr fd;k tk ldrk gA ;g ml okkfud lenk; d fy, vf/kd mi ;kxh glxk tk Qy Qlye nh?k vdkfMr vkj,u, t vkj ,evkbvkj,u, d {k= e dk; dj jg g %fp= 43%A



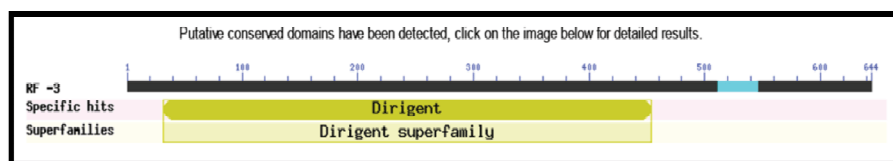
fp= 43- E; /k nh?k vdkfMr vkj,u, MVkcl %MuLncRNADB%

b;E; /h iÜkh /kCck jkx ifrjk/k d iR;k'kh thu dk Dykuhdj.k

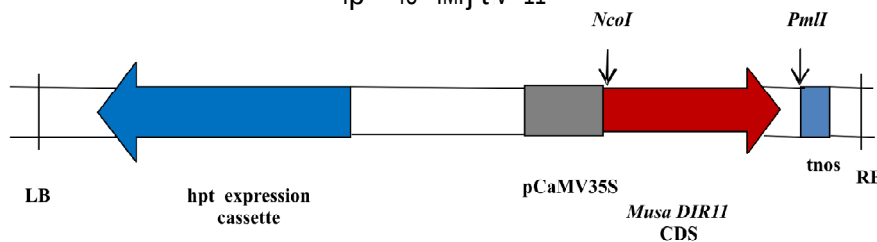
fofHkUu vfHkO;fDr ikQkbfyx d vk/kkj ij nk thuk %fMjtV 11 vkj jkxtuu l lcf/kr ikVhu½ dh pukrh nh xb fLFkr d vrxx ifrjk/kh fdLe e vfr vfHkO;Dr d : i e igpku dh tk pdh g %lkj.kh 19%A bu thuk dk vfHkO;fDr fo'y"K.k d ek/e l IR;kiu fd;k x;k g vkj ;g ik;k x;k g fd



fp= 44- fofHkUu le; vrjkyk ij b;E; /h iÜkh /kCck jkx d fo#) ifrjk/kh o lonu'khy fdLek e thu vfHkO;fDr lcf/kh v/;uk dk mi;kx djr g, Mhvkvkj ikVhu dk IR;kiu



fp= 45- fMjtV 11



fp= 46- pCAMBIAokgd e Mhvkvkj11 dKLVDV dk fodkl

lkj.kh 19- dy dh b;E; /h iÜkh/kCck ifrjk/kh fdLek e igpku x, thu

#fp d thu@ dk;l	i.k yckb d blV vkdkj	Vk lFØIV Lrj ij lhMh, l dk ifjor'u	ifrcy vufØ;k e Hkfedk@lHkkfor vfHkO;fDr e nxuk
fMjtV 11	536 bp	17-95	vfr vfHkO;fDr d ifj.kkeLo:i QhukfyDI lfr dodh; jkxtudk d ifr ifrjk/k d fodkl dh lHkkouk g
jkxtud l lcf/kr ikVhu %ihvkj½	957 bp	6-0	ikjf>Yyh j/kk dk fuek.k djd jkxtud i.kkyh e f>Yyh dk p;u'khy Lrj ij 0;o/ kkfur djuk

Mhvkbnkj11 ikVhu jkx ifrjk/kh fdLe e b;E; l h iÙkh /kCck l jki d l jki.k d rh l j fnu vijxyV gvk] tcf d lonu'khy fdLe e ;g doy 10o fnu gh vijxyV gvk %fp= 44%A blfy, fmfj tV 11 dk ijh yckb dk thu foyfxr dj d Dyku fd;k x;k g %fp= 45 vkj 46%] rkfd okf.kfT; d fdLe xkM u;u d ijkthuh ik/k fodflr fd, tk l dA

MhchVh&D;;Vh ifj;k tuk

4-5-3 to l ef) dj.k rFkk dy e jkx ifrjk/k dk fodk l

?kVd I: i hoh, dkLVDV I ;Dr Hkkjrh; dy dk gLrkrj.k vkj eY;kdu ¼, l- ckfdd; jkf.k] , l- mek vkj ,e- eby okXkuu½

dy dh nk fdLek uker% xkM u;u vkj j l Fkyh e iR;d dkLVDV ¼pBMGF-DC-34, pBMGF-DC-32, pBMGF-DC-12, pBMGF-DC-35 vkj pBMGF-DC-49½ d crjrh pu x, 10 ijkthuh ik/kk d iÙkh Årdk e psy 2a thu dh vfHkO;fDr dk ek=kRed fu/kkj.k fd;k x;kA ek=kRed okLrfod le; ih l hvkj fo'y"%.k %qRT PCR½ d fy, v/k ek=kRed vkjVh ih l hvkj dk mi;kx vkj,u, ueuk d : i e fd;k x;kA psy2a thu d eY; d l ekU;hdj.k d fy, lnhk thu d : i e vkj ih, l2 thu dk mi;kx fd;k x;kA iekVj l fcuk d kb l c/k j[kr g, ;g n[kk x;k fd vf/ kdk'kr% l Hkh ijkthuh ik/kk u ryuh; ik/kk dh vi{kk



fp= 47- vyx&Fkyx i{k= ijh{k.kk d vrxr ijkthuh tky?kj e ONA11 : ikrfjr j l Fkyh rFkk xkM u;u fdLek d ik/k

Py 2 thu dh vfr vfHkO;fDr inf'kr dh Fkha rFkkfi j dLVDV Mh l h 32 vkj m l d i'pkr Mh l h 12 e vU; dkLVDV dh ryuk e iÙkh Årdk e vi{kkdr de vfHkO;fDr inf'kr gbA bl l Li"V gvk fd nkuk gh Qy fof'k"V iekVj %E; l k , D l i flu vkj 1&, feuk l kbDy kikiu&1&dkckD l hyV vkD l h m t½ iÙkh Årdk e fj l koi.k vfHkO;fDr inf'kr djr gA rFkkfi j psy 2a thu dh vfHkO;fDr tk eDdk d ;fcDohfVu iekVj %Mh l h 34½ rFkk dy d xfpNr pM fo"kk.k %chchVhoh Mh,u, 4 iekVj Mh l h 35½ l l pkfyr gkr g] xj ijkthuh dh ryuk e mPp gA bl l ;g Li"V gvk fd psy 2a thu tk bu iekVj d }kj k l pkfyr gkr g] iÙkh rFkk tM Årdk l fgr ik/k d l Hkh Hkkxk e 0; ofLFkr : i l vfHkO;Dr gkr gA D; ;Vh , l vki h d vul kj chVk dj kVukbM d ek=kRed fu/kkj.k d fy, xj&ijkthuh okf.kfT;d fdLe j l Fkyh rFkk okf.kfT;d fdLe xkM u;u d Qyk dk xnk ifj i Dou voLFkk e , d= fd;k x;k vkj bl dk ,pih, y l h fo'y"%.k d ek/;e l ijh{k.kk fd;k x;kA okf.kfT;d fdLek j l Fkyh vkj xkM u;u d xne chVkdj kVukbM v'k Øe'k% 199-1 ng/g vkj 182-3 1ng/g FkkA

?kVd II- ykg thu dkLVDV I ;Dr Hkkjrh; dyk dk gLrkrj.k vkj eY;kdu ¼,e- eby okXkuu] vkb- jfo vkj d-t- t ;HkkLDju½

Lor= ijkthuh ?kVuk] j l Fkyh vkj xkM u;u] iR;d ik/kk e ykg dkLVDV pBMGF-DC-53 dh ipk l



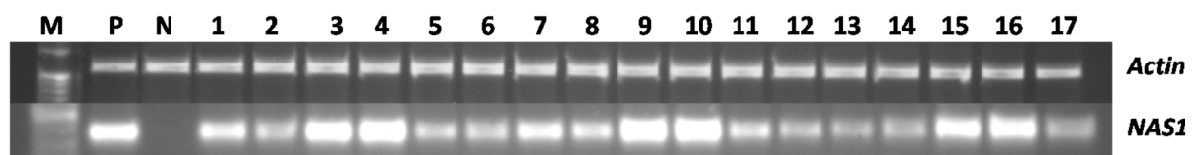


l [;kvk dk mi;kx djr g, ik/k : ikrfjr fd, x, ftue 10 v : ikrfjr ryuh; ik/kk e OsNAS1 thu fo|eku FkA budk ikFkfed vkj f}rh;d dBkjhjdj.k dkp ?kj n'kkvk efd;k x;k rFkk ik/kk dk vvx&Fkyx fd, x, i{k= ijh{k.kk d fy, ijktuh tky ?kj e jkik x;k %fp= 47%A : ikrfjr ik/kk dh ihlhvkj&ifV dh xb rFkk virC thu fof'k"V ikbejk dk mi;kx djd ,xkcdVhfj;e ln"n.k d fy, budh NVkb Hkh dh xbA jIFkyh rFkk xkM u;u d dN ijktuh ik/kk d iÙkh Årdk e OsNAS1 thu dh foHknu'khy vfHkO;fDr dk v/; ;u fjoI VklfØIVt&ihlhvkj d }kjk fd;k x;k; kA vkjVh&ihlhvkj }kjk ftu iR;d 34 jIFkyh rFkk xkM ijktufu;k dk ijh{k.k fd;k x;k; mue l Øe'k 16 o 18 e mPprj VklfØIV Lrj inf'kr g,A %fp= 48a vkj b%A OsNAS1 : ikrfjr ik/kk d iÙkh Årdk e ykg rRo d lp;u dk ek=kRed fu/kkj.k ykg eY;kdu fdV %fIXek% dk mi;kx djd dy ykg d tojkl;k;fud vkdyu d }kjk ek=kRed fu/kkj.k fd;k x;k; rFkk v : ikrfjr oU; ik/kk dh

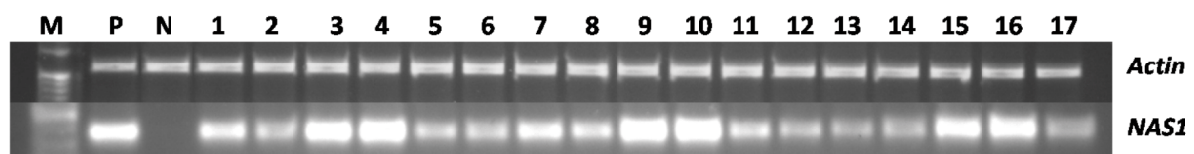
ryuk e bu : ikrfjr ik/kk dh ifÙk;k d Årdk e ykg rRo dh mPp ek=k ikb xbA ykg d ; mPp Lrj ijktufu;k e vkjVh&ihlhvkj }kjk fo'y"kr VklfØIV d Lrjk d lFk ryuh; FkA

OsNAS2 thu ugu dju oky pBMGF-DC-68 d f}rh; thu dklVDV d lFk jIFkyh rFkk xkM u;u dh 200 l vf/kd ijktuh ?kVuk, fodflr dh xbA lHkh : ikrfjr ik/kk dk thu fof'k"V ikbejk d lFk vvx&vyx ihlhvkj fo'y"n.k fd;k x;k; rkfd ijktuh dh mifLFkr dh ifV dh tk l d %fp= 49%A ; ijktuh ik/k vc ikFkfed dBkjhjdj.k ifØ;k d vrxr gA

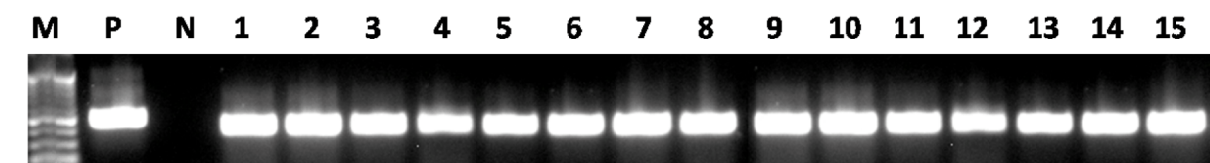
HkkHkk ijeK.k vul/kku dUn] eEcb l i{k= lher ijh{k.kk d fy, pyk, tk jg dk;Øe d ,d vx d : i e ikr fd, x, OsNAS1 l : ikrfjr jIFkyh rFkk xkM u;u d ijktuh ik/kk dk ikFkfed dBkjhjdj.k fd;k x;k; g rFkk vc mudk xhugm l n'kkvk e f}rh;d dBkjhjdj.k fd;k tk jgk gA



fp= 48a- OsNAS1thu dh foHknu'khy vfHkO;fDr d fy, ijktuh jIFkyh d ik/kk dk foyke VklfØIVt&ihlhvkj fo'y"n.k



fp= 48b. OsNAS1thu dh foHknu'khy vfHkO;fDr d fy, ijktuh xkM u;u d ik/kk dk foyke VklfØIVt&ihlhvkj fo'y"n.k



fp= 49- nptII thu fof'k"V ikbejk l ;Dr ONA2I : ikrfjr ik/kk dh ihlhvkj ifV

2kVd m - okf.kfT;d fdLe j lFkyh d dkjxj blh, l dk fodkl vkj m l Hkkjrh; l k>nkjk dk miyC/k djku ¼, l- mekj , l- cdh; kjuh vkj , e, l- l jLorh½

okf.kfT;d fdLe j lFkyh rFkk xkM u;u d dkjxj blh, l vko'; drkvk d vul kj lcf/kr Hkkjrh; l k>nkjk dk miyC/k dj, x, A okf.kfT;d fdLe j lFkyh vkj xkM u;u d dy Øe'kh 31 fe-fy- vkj 28 fe-fy- , l l hoh vU; Hkkjrh; l k>nkjk dk forfjr fd, x, A

okf.kfT;d fdLe xkM u;u d blh, l 0; RiUu ik/ kk dk i{k= eY; kdu

okf.kfT;d fdLe xkM u;u dh iFke Qly rFkk iMh Qly nkuk d vdkMk dh ryuk dju l ; g inf'kr gvk fd blh, l vkj ijkg dh ukd l 0; RiUu

Yield comparison of First crop of cv. Grand Naine

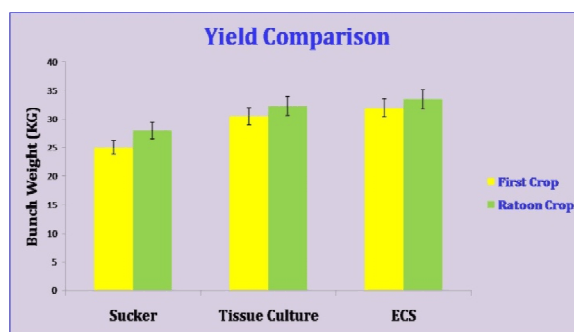


fp= 50a- okf.kfT;d fdLe xkM u;u dh iFke Qly l blh, l 0; RiUu ik/k

Yield comparison of Ratoon crop of cv. Grand Naine



fp= 50b- okf.kfT;d fdLe xkM u;u dh iMh Qly l blh, l 0; RiUu ik/k



fp= 51- okf.kfT;d fdLe xkM u;u dh iFke Qly vkj iMh dh Qly l iklr mit dh ryuk

ik/kk dh xPNk mit ¼32 fd-xk-½ , d&n l j d cjkj Fkh] tcf d ?kudn l 0; RiUu ik/kk l do y 28 fd-xk- mit gh feyh ¼fp= 50a vkj b½A blh, l d iMh ik/ kk u iFke Qly d xPNk dh mit ¼32 fd-xk-½ dh ryuk e cgrj mit ¼33 fd-xk-½ inf'kr dh ¼fp= 51½A

Mh, b ifj; k tuk

4-5-4 ifjr mRifjoru tuu d ek/; e l j lFkyh ¼, , ch½ e ¶; tfj; e e>ku d fo#) fVdkÅ ifrjk/k l ; Dr xj&jk l k; fud mRifjork dk fodkl ¼, e, l- l jLorh½ , l- mekj , l- ckfdd; jkf.k vkj- rxoy½

blh, l d fy, , yMh50 dh ?kkrd [kjkd jklk; fud mRifjork d fy, Kkr dh xb g tk b, e, l ¼0-1 ifr'kr & 2 ?kV d fy, ½] Mhb, l ¼3mm & , d ?kV d fy, ½] l kfm; e , tkbm ¼0-005 ifr'kr & 1 ?kV d fy, ½ vkj xkek fdj.ku ¼35 Gy½ gA ; g rkt Hkkj e iklr ¼, QMCY; t h½] , l l hoh vkj iutuu n{krk d vk/kkj ij fu/kkfjr dh xb gA ifjiDo dYpj dk , e, 3 e iutuu d i'pkr ¶; l fjd vEy ¼0-1 mm½ ; k dYpj fQYVV ¼6%½ ; k ch; ofjflu ¼5 µM½ l ; Dr , e, 4 e vdfjr fd; k x; kA b, e, l j Mhb, l vkj xkek fdj.ku l 0; RiUu l ; VVo mRifjork d dy pkj cp dk jkxtud ¶; tfj; e vKd l h l ikje , Q-, l i h- D; c l l pukrh nh xBA b l l fcuk fd l h jkx d y{k.k oky 20 ifrjk/kh o'kØek ¼b, e, l 16(

Mhb, l 3(xkek fdj.ku 1½ dh igpku dh xb ½fp= 52% A



fp= 52- 1; tfj; e e>ku ifrjk/k d fy, okf.kfT; d fdLe j l Fkyh d l; Vfv mRifjor d dh xeyk e NVkb

ihihoh vkj , Qvkj, ifj; ktuk

4-5-5 dy ½E; l k i t k f r; k d fy, [kr e Qly fof'k"V Mh; , l fn'kfun'k ¼, l- mekj , e, l- l j Lorh vkj , l- ckfdd; jkf.kk

33 l nHk ifof"V; k] 2 ub ifof"V; k rFkk 4 d"kd fdLek l fgr yxHkx 39 ifof"V; k jkih xba

ihihoh vkj , Qvkj vf/kfu; e d vrxr d"kd fdLek d i thdj.k d ckj e pkj tkx: drk dk; Øe VMuokMh] ckykokMh vkj , uij] tyxko ftyk egkj"V(rFkk b: EcdkM] ukxjdkby] dU; kdekjh ftyk] rfey ukM e vk; kft r fd, x, ftue yxHkx 220 fd l kuk u Hkx fy; k vkj b l l mUg ykHk igpka b l d vykok dy dh fdLek d i thdj.k d egRo d ckj e vkdk"kok.kh d ek/; e l nk jfM; k okrk, Hkh i l kfjr dh xba

fd l kuk dk Hkitkfr; k t l dkyh igkfM; k] ukeDdy ftyk l eukjft re vkj uekju(fr: uyoYyh fty l ekVh(b: EcdkM] ukxjdkby] dU; kdekjh fty l lekVh] fpxku] FkkVV fpxku vkj dnjokyh fpxku d fy, ihihoh vkj , Qvkj vf/kfu; e d vrxr 8 Hkitkfr; k d i thdj.k d fy, fd l kuk dk vkonu&i= Hkju e lgk; rk inku dh xba

egkj"V d tyxko fty d , uij d , d fd l ku Jh egktu fodk l nÜkk= }kj k i t fur d"kd fdLe] dey fodk l 1 dk fo|eku okf.kfT; d fdLe xkM

u; u l r; k j fd; k x; k g ft l dkuuh : i l iklr fd; k x; kA b l fdLe d ik/k dh Åpkb 320&330 l- eh- d chp g A xPN dh vkdfyr cyukdkj gkrh g rFkk Qyk dk jx gYdk ihykiu fy, g, gjk gkrk gA ble okf.kfT; d fdLe xkM u; u dh ryuk e vrjxkBk d chp vf/kd vrjky gkrk gA b l fd l ku u ihihoh vkj , Qvkj ikf/kdj.k] ub fnYyh e i thdj.k d fy, vkonu nkf[ky dj fn; k g rFkk eY; kdu d fy, Hkk- d-v-i-&, uvkj l hich dk ?kudn vkir fd, gA budh jkikb vxLr 2017 e dh xb rFkk Qly ijkg fodf l r gku dh voLFkk e gA

Hkk-d-v-i-& , vkb l hvkj ih ifj; ktuk

4-5-6 Qyk ij , vkb l hvkj ih d vrxr dy e l l; kÜkj gkfu; k dk eY; kdu

Hkk-d-v-i-&, uvkj l hich rfey ukM] dukVd] djy] vk/k in'k vkj egkj"V e fLFkr l Hkh ikp , vkb l hvkj ih dUnk u l l; kÜkj gkfu; k d eY; kdu d fy, dk; Øe d leUo; u gr ukMy dUn gA okf.kfT; d fdLe xkM u; u d fy, Fkuh vkj bjkm ftyk rFkk okf.kfT; d fdLe iou d fy, fr: fPpjkiYyh vkj VVhdkfju ftyk e , d lo{k.k fd; k x; k rkfd fofHkUu Lrjk uker% [kr Lrj ij] ifjogu Lrj ij] l dyu@Fkkd ck tkj ej HkMkj.k vkj idu d Lrj ij dy e gku okyh fofHkUu l l; kÜkj {kfr; k dk vkdyu fd; k tk l dA Hkk-d-v-i-&, uvkj l hich] fr: fPpjkiYyh e vkdfyr gkfu; k d ifj.kkek l Hkh ; g inf'kr gvk fd Fkuh vkj bjkm ftyk e xkM u; u okf.kfT; d fdLe d ekey e ; g {kfr Øe'k 18-96 ifr'kr vkj 19-12 ifr'kr Fkh] tcf d okf.kfT; d fdLe iou e fr: fPpjkiYyh vkj VVhdkfju ftyk e ; g {kfr Øe'k 14-81 ifr'kr vkj 14-46 ifr'kr FkhA rfey ukM e vU; jkT; k dh ryuk e nkuk gh fdLek d ekey e U; ure l l; kÜkj gkfu; k i thdr dh xba tyxko dUn e okf.kfT; d fdLe xkM u; u d ekey e 31-25 ifr'kr l l; kÜkj gkfu; k fjdkM dh xba vx.kh dUn@vx.kh iLrkrk gku d ukr pkj fofHkUu dUnk

uker% cxy:] tyxko] dUukjk] dk0oj vkj
fr:fPpjkiYyh %Hkk-d-v-i-&,uvkj l hch% }kjk lo{k.kk
dk ldfyr fd;k x;kA ifj.kkek l ;g Li"V gvk fd
dy e IL;kUkj gkfu;k dUukjk] dk0oj] Hkk-d-v-i-
&,uvkj l hch] fr:fPpjkiYyh vkj tyxko dUnk e
Øe'k 21-97] 25-09] 16-83 vkj 31-25 ifr'kr FkhA
l Hkh dUnk e l Hkk-d-v-i-&,uvkj l hch] fr:fPpjkiYyh
e lcl de 16-83 ifr'kr dh IL;kUkj gkfu fjdKM
dh xb tcf d tyxko dUn e IL;kUkj gkfu dk eku
lokPp %31-25 ifr'kr% Fkka

Hkk-d-v-i- & ckg; fuf/k lgk; rk iklr ifj;ktuk

4-5-7- le; ij uk'kd tho ic/k d ckj e fu.k;
yu d fy, dN puh gb cxxokuh Qlyk e dhV
uk'kd thok dk LFky ij funku % t- ifj.k%

LVgkj l QfQdV l ijkuh %dkdhfuyhMh% dk dyk]
uhcoxh; Qy rFkk ukfj;y ij vU; LVgkj l itkfr;k
d lkFk ryuk djr g, uhc oxh; Qyk ij ijHk{kh dh
,d ub itkfr d : i e of.kr fd;k x;k gA bl
itkfr dh uhcoxh; Qy d o{k k ij dVdh uk'kd thok
d l {e ijHk{kh d : i e igpku dh xb gA

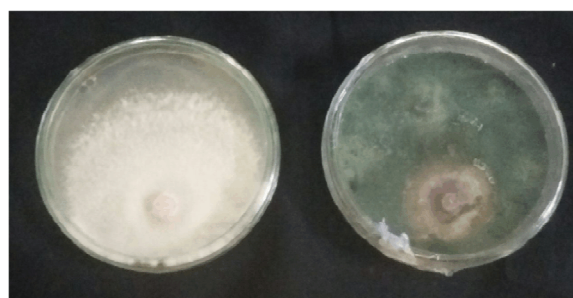
4-5-8 Hkkjr e dy dk l Øfer dju okyh ¶;tfj;e
vkDl hLkije ,Q-,lih- D;cl d lof/kd mx
ihkn dk lo{k.k] y{k.k&o.ku vkj ic/k %vkj-
rxoy vkj ,l- ckd d; jkf.k%

,Qvk/h&Vhvkj4 d fo#) dy dh okf.kfT;d
fdLek dk xeyk lo/ku eY;kdu

xeyk lo/ku n'k v d vrxr ,Qvk/h&Vhvkj4
d fo#) 10 fofHkUu okf.kfT;d fdLek dh NVkb l
;g inf'kr gvk fd okf.kfT;d fdLek jM cukuk
%, , , %] uUnu %, , , ch% vkj lck %, chch% e vU; fdLek
dh ryuk e 3 dk jkx Ldkj inf'kr gvka vU; fdLek
u 1&6 d ieku ij 4 l vf/kd Ldkj inf'kr fd;k
Fkka dkb Hkh fdLe ,Qvk/h&Vhvkj4 d fo#) ifr'jk/
kh ugh ikb xba

to ,tVk rFkk okuLifrd jlk;uk dk
,Qvk/h&Vhvkj4 d fo#) Loik= eY;kdu

,Qvk/h&Vhvkj4 d fo#) fofHkUu to,tVk
rFkk okuLifrd jlk;uk d Loik= eY;kdu l ;g
ldr feyk fd vr%khVkbdkMek ,Lifjye rFkk 50
ifr'kr lknrk ij okuLifrd jlk;u thuk l
,Qvk/h&Vhvkj4 d ekblfy;k dh of) e Øe'k 60
vkj 70 ifr'kr dk fujk/k gkrk gA rFkfi] xk; d
xkcj l foyfxr fd, x, Vh- ,Lifjye % l hMh1% l
,Qvk/h&Vhvkj4 d ekblfy;k dh of) d lkFk&l kFk
ch tk.k d vdj.k e Loik= n'k e 100 ifr'kr fujk/
k gkrk g %fp= 53%A



fp= 53- VkbdkMek ,Lifjye d }kjk ,Qvk/h&Vhvkj4 dk
Loik= ekblfy;k dh of) fujk/k

Hkkjr d fofHkUu jkT;k e ,Qvk/h&Vhvkj4 dh
mifLFkr d fy, lo{k.k

mUkj in'k e ,Qvk/h&Vhvkj4 dh fLFkr

Hkk-d-v-i-&l hvkb, l ,p] y[kuÅ d lg;kx l
mUkj in'k d Qtckn fty d l goky Cykd d
dVjkyh] exyk l h vkj edljxt xkok e fd, x,
,d lo{k.k l dy dh okf.kfT;d fdLe xkM u;u e
¶;tfj;e e>ku jkx dh mifLFkr dk ldr feyk tk
dy dh [krh oky {k= e 30&45 ifr'kr rFkx yxHkx
95 ifr'kr rd d {k= e Qyk gvk Fkka l Øfer ueuk
d fo'y" k.k l bl rF; dh if"V gb fd mUkj in'k e
dy dh okf.kfT;d fdLe xkM u;u e ¶;tfj;e
e>ku bl dh m".kdfVc/kh tkfr 4 %,Qvk/h&Vhvkj4
d dkj.k Fkk %fp= 54%A



fp= 54- mÜkj in'k d Qtkckn fty e ¶; tfj;e e>ku dh m".kdfVc/kh tkfr 4 }kjk u"V dh xb dy dh Qly okyk {k= ¶okf.kfT;d fdLe xkM u;u½

e/; in'k vkj xtjkr e ,Qvk/h&VhvkJ4 dh fLFkfr

e/; in'k d cjkuij fty ¼25 gDVj {k= e½ rFkk xtjkr d ljr fty ¼20 gDVj {k= e½ fd, x, lo{k.k l dy dh okf.kfT;d fdLe xkM u;u e ¶; tfj;ee>ku d yxHkx 10&50 ifr'kr idki dk irk pykA bl jkxtud dk ,Qvk/h tkfr 1 d : i e igpkuk x;k ¼fp= 55½A



fp= 55- xtjkr d ljr fty e dy d ¶; tfj;e e>ku ¼,Q,lhtkfr 1½ l lØfer ik/kk ¶okf.kfT;d fdLe xkM u;u½ dk ijh rjg lQk;k

if'pe cxky e ,Qvk/h&VhvkJ4 dh fLFkfr

if'pe cxky d dy dh [krh oky ie[k ftyk e fd, x, lo{k.k d vk/kkj ij okf.kfT;d fdLe xkM u;u] fo"k" : i l Ård lo/ku }kjk r;kj fd, x, dy e ¶; tfj;e e>ku d idki dk irk pyk ¼80 ifr'kr l vf/kd½A ,Qvk/h jkxtud dk vkf.od

fof/k l y{k.k&o.ku dju d ifj.kkeLo: i ;g irk pyk fd ;g ,Qvk/h tkfr 1 d vrxr vkrk gA

dukVd e ,Qvk/h&VhvkJ4 dh fLFkfr

dukVd ¼fpdcYYkij vkj cxy: ftyk½ e fd, x, lo{k.k l dy dh okf.kfT;d fdLe u; iou ¼50 ifr'kr l vf/kd½ ¶; tfj;e e>ku jkx d fo|eku gku dk irk pyk tcf d okf.kfT;d fdLe xkM u;u e bl dk dkb idki ugh n[kk x;kA

4-5-9- VhdK rFkk unkfudh ij l hvkji h ¼vkj- lYoJktu vkj lh- vujk/kk½

dy d lgi= fpÜkh fo"kk.k ¼BBrMV½ dh LFky ij igpku d fy, ik'o iokg jkxk dh iVVh vFkkr yVjy ¶lyk bE;kuk fLVi dk ekuuh; dUnh; df" ,o fd lku dY;k.k e=h Mk- jk/kk ekgu flg u Hkkjr; df" vul/kku ifj"kn d 89o LFkkiuk fno l d nkjku foekpu fd;kA 10 ng vfHkO;Dr ikVhu l fo"kk.k BBrMV bE;ukfLVi }kjk igpku dh xBA bl d l kFk gh nk vU; fo"kk.kvk uker¶ BBrMV rFkk [khjk d fpÜkh fo"kk.k ¼lh,eoh½ dk ,d l kFk irk yxku d fy, ,ykb tk fof/k Hkh fodflr dh xBA lh,eoh dh igpku d fy, ik'o iokg eY;kdu l lcf/kr fofHkUu ikpy ekudhdr vkj fodflr fd, x,A Mh,u, fo"kk.kvk uker¶ dy d xFPNr pM fo"kk.k ¼chchVhoh½ vkj dy d /kkjh elj fo"kk.k ¼ch, l ,eokboh½ d fy, fjdchut ikyhejt ,ElyhfQd'ku ¼vkj ih,½ vk/kkfjr igpku i.kkyyh dk ekudhdj.k fd;k x;k rFkk Mh,u, vkj vkj,u, fo"kk.kvk ¼chchVhoh½ vkj lh,eoh d fy, eYVhlyDI foyke VklfØl'ku&fjdchut ikyhejt vko/ku&vk/kkfjr igpku i.kkyyh dk Hkh ekudhdr fd;k x;kA

MhchVh&,Vhvkb ifj;k tuk

4-5-10 Ård lof/kr ik/kk d fo"kk.k l phdj.k rFkk vkuof'kd QhMfyVh d fy, i;kx'kkyk

iR;kf;r lfo/kk ¼vkj- lYojktu vkj ,e,l-
ljLorh½

rbI MhchVh l ekU;rk iklr Ård lo/ku mRiknu
bdkb;k l iklr fd, x, dy dh fofHkUu fdLek d
ik"kd dYpj vkj Ård lo/ku l mxk, x, ik/kk dk
dy d fo"kk.kvk d fy, ijh{k.k fd;k x;kA dy d
dy 18192 ikni ueuk dk dy d pkj fo"kk.kvk dh
mifLFkr d fy, ijh{k.k fd;k x;kA bl o"k 57-72
fefy;u Ård lof/kr ik/kk dk x.koUkk iek.k&i=
tkjh fd, x,A

fjikV/khu vof/k d nkjku ^Ård lof/kr ik/kk
d fo"kk.k lphdj.k rFkk vkuof'kd QhMfyVh ijh{k.k
d fy, i;kx'kkyk iR;kf;r lfo/kk* dh fo'k"Krk d
: i e Ård lo/ku }kjk r;kj fd, x, 979 Ård
lof/kr ik/kk d cpk ¼xkM u;u] fofy;EI] jkLVk]
u; iou] jM cukuk] DohVy uUnu] lckjh vkfn½ dk
, l, lvkj vkj vkb, l, lvkj ekdj dk mi;kx djr
g, vkuof'kd QhMfyVh gr ijh{k.k fd;k x;k rFkk
lcf/kr fjikV tkjh dh xBA o"k 2017&18 d nkjku
lLFkku }kjk 17-23 yk[k #i; dh vk; vft r dh xBA



5 eY;kfdr ,ogLrkrfjrik|kxfdk;

5-1 jfM;kokrk,

oKkfud dk uke	fo"k;	i:lkj.k dh frfFk
vkj- lYojktu	dye jkx ic/k	1 viy 2017
d-t- t;HkkLdju	vkthfodk d fy, dyk	25 viy 2017
vk-b- jfo	dyk fd lkuk d fy, dyk vkj vkthfodk	11 tykb 2017
,fr :bkuoy	vkuof'kdfofo/kr krFkk ihihoh vkj ,Q vkj vf/k fu;e d vrxr dy dh Hkitkfr;k d ithdj.k dk egRo	13 fl rEcj 2017
oh- dekj	dye ty] ik"kdrrRo vkj [kjirok jic/k	10 viy 2017
vkj- ineukHku	dyei;koj.kfe= dhVuk'kd thoic/k	29 viy 2017
vkj- rxoy	fofHkUu jkxk l dy dh l jfkk	2 Qjoh 2018
d-,e- f'kok	dye lL;kÜk jik kfxdh	9 Qjoh 2018

5-2 njn'kuokrk,

LVkQ dk uke	fo"k;	i:lkj.k dh frfFk
ih- jfopkfe	dy dk eY;o/ku %dIVu Vhoh vkj icyhej Vhoh%	14 tykb 2017
ih- jfopkfe	dy dh fdLe %eDdy Vhoh vkj ifFk;kFkykejb Vhoh%	13 vDrcj 2017
d-,u- f'kok	dy d eY;of/krmRikn vkj m e'khyrk d fodk le Hkk-d-v-i-&,uvkj l hch dh Hkfedk %njin'ku&ey;kye%	28 fn lEcj 2017

5-3 vk;kftr in'kfu;k@in'kfu;keHkxnxkj

vk;k tu dk uke	vk;k td	LFkku	frfFk
,xh bVD l&2017	Vh,u,;(l hvkbvkb(Hkk-d-v-i- vkj rfeyukM ljdkj	l hvkMhvkb, l, l vkb, 0;kik jdUn] dk;EcÜkj] rfey ukM	14&15 tykb 2017
jk"Vh; dyk mR loj 2017	l hvkbvkbvkjVh,u,;	, l hvkjvkjvkb %Vh,u,;%] enj] rfeyukM	21&23 tykb 2017
24ok Hkk-d-v-i-& ,uvkj l hch LFkkiuk fno l ,o fd l k ueyk	Hkk-d-v-i-&,uvkj l hch	Hkk-d-v-i-&,uvkj l hch] fr :fPpjkiYyh] rfeyukM	21 vxLr 2017
,xh ,D l i k&2017	i'ke fodVu	l V tk l o l Vh l dy] fr :fPpjkiYyh] rfey ukM	1&4 fl rEcj 2017
ckxokuhij vrjjk"Vh; flEikft;e % ikFkfedr k, vkj mHkj rhgbiofÜk;k	Hkk-d-v-i-& vkbvkb,pvkj	Hkk-d-v-i-&vkbvkb,pvkj] cxy :] dukVd	5&8 fl rEcj 2017

vk;ktu dk uke	vk;kt d	Lfkku	frfAk
rrh; Hkkjrh; vrjjk"Vh; foKkumR lo 2017 %vkbvkb, l, Q& 2017%	Mh, l Vh] ubfnYyh(vkbvkbVh pUub vkj rfeyukM ljdkj	vUuk fo'ofok ky;] pUub] rfey ukM	13&16 vDrcj 2017
fo'oenk fno l	Hkk-d-v-i-& df"foKkudUn] fl : x kef.k vkj Hkk-d-v-i-& df"foKkudUn] d : j	Hkk-d-v-i-&df"foKkudUn] fl : x kef.k] fr : fPpjkiYyh] rfey ukM	5 fn lEcj 2017
df"ki lldj.k ,o eY;o/kuij vrjjk"Vh; in'kuh ,odk;'kkyk %oh,vkbth, 2017%	djy ljdkj	djyfo'ofok ky;] f=pj] djy	27&31 fn lEcj 2017
,xh ,D l ik&2017 'm>kojfr : fo>k*	U; t&7 ehfM;k] pUub	r tkoj] rfey ukM	24&26 tuojuh 2018
Hkk-d-v-i-& ,uvkj l hchj t r t ; rh lekjk	Hkk-d-v-i-& ,uvkj l hch] fr : fPpjkiYyh] rfey ukM	Hkk-d-v-i-&,uvkj l hch	17 Qjojh 2018
jk"Vh; dyk mR lo 2018] djy	lhvkb, l, l, vkj djy ljdkj	fr : vurije] djy	17&21 Qjojh 2018
jk"Vh; cxxokuh eyk	Hkk-d-v-i-& vkbvkb,pvkj	Hkk-d-v-i-&vkbvkb,pvkj] cxy :] dukVd	15&17 eksp 2018
df"m Uufr eyk	Hkk-d-v-i-&,uvkj l hch	Hkk-d-v-i-&,uvkj l hch] fr : fPpjkiYyh] rfey ukM	17 eksp 2018

5.5 ipkj

Hkk-d-v-i-&,uvkj l hch dh xfrfof/k;k]
cBdk@ik|kfxdhlpuk %ykd fi; y[k% ijdy 25
i lfoKflr;k fofHkUu jk"Vh; o jkT; Lrj d
l ekpkj&i=k] if=dvk] tuyk] jfM;k]
Vyhfotuvknijdy dh [krhdjuokyfd lkuk d ykHk
d fy, tkjh dh xBA

5.6 if'kfk.k

df"k rFkk cxxokuh vf/kdkfj;k] Lo; l gk; rk legk]
m |fe;k] Nk=k rFkkfgr/kkj dkl fgr 3400 l vf/

kdfd lkuk u Hkk-d-v-i-&,uvkj l hch }kj dy ijf
odflr ik|kfxd;k d ckj ev|rulpukiklr dju
d fy, Hkk-d-v-i-&,uv kj l hch dk nkjk fd;kA ;
l Hkh n'k d fofHkUu Hkkxk l vk, Fk vkj mUg
fd lkuk@Nk=k d ykHk d fy, Hkk-d-v-i-&,uvkj l hch
dh xfrfof/k;k@ik|kfxd;k d ckj ec rk;
kx;kAvkmVjhp dk; Øek d vrxrHkk-d-v-i-
&,uvkj l hch d oKkfudk u n'kHkj d 5]000 l vf/
kdoKkfudkd if'kfkrfd;kA



6 f'k{k ,oif'k{k.k

6-1 Nk=k dk exn'ku

Nk= dk uke	mikf/k	ifj;ktuk dk 'kh"kd	v/;fk
,e- xkih	i h,p-Mh- ¼ I {etho foKku½	dy dh okf.kfT; d fdLeu; u e ¼; tfj; e e>kujkx ¼¼; tfj; evkD l hL ikje ,Q-, l i h- D; cl ½ d ic/k gr fojk/kh l {ethok ,ookuLifrdj l k; uk dh igpku o eY;kdu	vkj- rxoy
, l- lerh	i h,p-Mh- ¼ to ik kfxdh½	¼; tfj; e e>kujkx d fo#) dykfof'k"VvkCLdyjekbdk jkbtydodk d fodk l d fy, toik kfxdh; ; fDr; k	vkj- rxoy
i h- xxknoh	i h,p-Mh- ¼ to ik kfxdh½	f l xkdVki Ûkh /kCckjx tudk dk vkuof'k'dfofo/krkfo'y" k.kr Fkk l {ethok d ek;/e l bldic/k	vkj- rxoy
, -gekorh	ch-Vd ¼ to ik kfxdh½	dhVokgd }kjky d lgi= fpÙkhfo"kk.k dk Qyko	vkj- lYojktu
i h- fi;dk	,e-, l l h- ¼ to ik kfxdh½	dy d i"i o ch t d fofHkUuÅrdkedy d lgi= fpÙkhfo"kk.k dk vkf.odfunku	vkj- lYojktu
vkj- leu	,e-, l l h- ¼ to j l k; u foKku½	dy d i"i lgi= ,Fkkl; kfuu dk tojklk; fud y{k.k& o.kurFkkcgndophdj.k	,e- eby okxuu
d- dyerh	,e-, l l h- ¼ to j l k; u foKku½	ONA1thu l vkuof'kd : i l : ikrfjrj l FkyhrFkxkMu; udy d ik/kk dk tojklk; fud ,ovkf.od y{k.k&o.ku	,e- eby okxuu
,e- io h.kk	,e-, l l h- ¼ to j l k; u foKku½	l {etfodd l kfV; e d }kjky dh okf.kfT; dfdLexkMu; u ¼, , , ½ eyo.krkifrcy dk mRFkku	vk b- jfo
,e- l ; iHkk	,e-, l l h- ¼ to j l k; u foKku½	dy dh okf.kfT; dfdLej l Fkyh ¼, , ch½ eenkeueh dh deh d ifrcy d mRFkku i j l {etfodd l kfV; e dk iHkko	vk b- jfo
fi; k ,fy t k cFkYkf l l	,e-, l l h- ¼ [kk ik kfxdh ,ox.ko Ûkk vk'ok l u½	dye ifjiDou , tV }kj k iHkkfor Hkkf rd& jklk; fud ifjoru	d-, u-f'kok

Nk= dk uke	mikf/k	ifj;ktuk dk 'kh"kd	v/;fk
Vhuk t k l Q	,e-, l l h- ¼ [kk i k kfxdh ,ox.koUkk vk'ok l u½	dy d vkVij vk/kkfjr LoYikgj [kk inkFkk ½e : Dd½ dk ekudhdj.k o fodk l	d-,u- f'kok
vukxk	,e-, l l h- ¼df"k vfHk ; kf=dh½	dy d Lykbl dkl [kku d fy, l dj 'k"dui.kkyh dk fodk l	d-,u- f'kok
d- dkfrd;u	,e-, l l h- ¼tolpukfoKku½	dyetfodvkjvtfodifrcyk d nkjkufHkUu : i l 0;DrifjdYiukRediVhuk dk buflfydkdk;kRed ,ukV'ku	, l- ckfdd; jkf.k
, l- m"kkjkuh , l- vkjrh	ch-Vd ¼toik kfxdh½	dyechtghurk d fy, mUjnk;ht huk dh igpku	, l- ckfdd; jkf.k
dhjfrxk	,e-, l l h- ¼toik kfxdh½	dy ½E; l k i t kfr; k½ okf.kfT;dfdLej l Fkyh ½f l Yd&, ,ch½ et huvfHkO ; fDr d fy, dkf; dHk.k tuufj l lVjdktu t ½, l bvkjd½	,e-, l- l jLorh
, l- fi ; dk	ch- Vd ¼toik kfxdh½	dy dh rhuffHkUuokf.kfT;dfdLek ½djijoYyh] j l Fkyhvkj iou½ eijxdk" k lo/kuvufØ; kdk l /kkj uijdYpjek/;ek dk iHkko	Mh- jke t ; e
, l- nxknoh	,e-, l l h- ¼toj l k; ufoKku½	dy d j'k l Q : fydvEy dk mRiknu	ih- l j'kdekj
ckcht k t HkxX; fot ; u	,e-, l l h- ¼ [kk i k kfxdh ,ox.koUkk vk'ok l u½	d{k rkiekuijdy dh ijijxrfdLek d fy, ifjiDou voLFk kij fuHkjjxpKv dk fodk l	ih- l j'kdekj
tul kjg tdc	,e-, l l h- ¼ [kk i k kfxdh ,ox.koUkk vk'ok l u½	dy d vkV l ikLrvkjfNyd l fljd dk fodk l	ih- l j'kdekj
euht k e/k	,e-, l l h- ¼ [kk i k kfxdh ,ox.koUkk vk'ok l u½	dy d fNyd l ih&ck;kfVD l dk fodk l vkjehBddedk; kRedifrLFkku d : ie id g, dy d vkV dk mi ; kx	ih- l j'kdekj



6-2 if'k{k.k

6-2-1 ifj ljeif'k{k.k

if'k{k.kdk;Øe dk 'kh"kd	ikB;Øe leUo; d	frfFk
ck;j Øki l kbf l l fyfeVM] eEcb d vf/kdkfj;k d fy, , l- mek ^x.koUkki.kdy dk mRiknu vkj mRikndrk c<ku d fy, oh- dekj dy dh gkb&Vd [krh*		21&23 tu 2017
^f'k'kvkgkj vk/kkfjr dyk v thjrFkdy d vkV dk mRiknu* d-,u- f'kok		8 fl rEcj 2017
^dyk d vkV vkj f'k'kvkgkj vk/kkfjr vkV dk mRiknu* d-,u- f'kok		1&2 ekp 2018
^dy d i"i dh IL;kUkj l k t&l Hkky] idftx ,oHkMkj.k* d-,u- f'kok		2 ekp 2018
dy d eY;of/kr mRiknk dk mRiknu , l- mek		12&16 ekp 2018
	d-,u-f'kok	
	ih- l j'kdekj	
Hkkjr&vYhdk d vrxr vYhdk jk"Vkd k ^fo"kk.k l vkj- lYojktu		15&29 ekp 2018
iHkkfor dy rFk klyVu d fy, vfr mRd"V		
vkf.odunkfudrd uhd* QkjelfeV&III		
ch-, l l h- ¼ toik kfxdh½ Mk- ,u-t-h-i-h- vkV l I HkhoKkfud		11&26 eb 2017
,M l b l dkyt] dk;EcUkj d f}rh; o"k d Nk=k d		
fy, bVuf'ki dk;Øe		
t-l h-Vh- egkfo ky; &vfHk;kf=dh ,oik kfxdh dk;EcUkj d-,u- f'kok		21&23 tu 2017
d ch-Vd ¼ [kk ik kfxdh½ d Nk=k d fy, ih- l j'kdekj		
^dye i l Ldj.k ,o eY;o/ku* ij bVuf'ki dk;Øe		
Jh l LFk bLVhV;V vkQb thfu;fjx , MVDuky k th] I Hkh oKkfud		20&27 uoEcj 2017
pUub rFk kcUukjh vEekubLVhV;V vkQ VDuky k th]		
I R;exye d ch- Vd ¼ toik kfxdh½ d Nk=k d		
fy, bVuf'ki dk;Øe		



fp= Hkk-d-v-i-&,uvkj l hch e vrjjk"Vh; if'k{k.k.kkFkh

if'k{k.kdk;Øe dk 'kh''kd	ikB;ØeleUo;d LFku	frfFk
Ienh cnjxkg }kjkncb dku Unu dy d fu;kr gr Q;j ,DI ikV fyfeVM] dkPph d vf/kdfj ;kdk ^uUnu dyk dh IL;kÜkj l kt& l HkkY] if'k{k.k ,oidftx*	, l- mek vkj- rxoy d-,u- f'kok ih- l j'kdekj	, jkek ,DI ikV l dkYM LVkj t] dEce] rfey ukM
Q;j ,DI ikV %bfM; k½ ik-fy- dkPph d LVkQ d fy, ^dy dh uUnufdLe d fu;kr d fy, J"BIL;u] l kt&l HkkY] idftx ,ohkMkj.krduhd yyxi d LVkQ d fy,	oh- dekj vkj- rxoy d-,u- f'kok ih- l j'kdekj vkj- rxoy	pkejkt uxj] dukVd(idgkm l] vxkekyh] ,.kkdye e dy d [kr vkj dkPph cnjxkg] djy ncb] ;,b
^dyeIL;kÜkjic/k vkjeY;o/ku*	d-,u-f'kok	
fdl k u lenk;kdk ^ihihoh ,Qvkj, d vrxr dy dh nl h Hk i tkfr;k d i thdj.k d egRo* d ckje cgn io/ku ijrkrdfyd if'k{k.k	,fr : xukuoy ,e-, l- l jLorh	b : EcdkM] ukxj dkby] rfey ukM Hkk-d-v-i-& df'k foKku dUn] i>[kjh] d : j] rfey ukM
		16 tu 2017
		11&12 tykb 2017 vkj 19&22 vDrcj 2017
		9&10 vxLr 2017
		13 fl rEcj 2017
		21 fl rEcj 2017





7 ijLdkj ,oI Eeku

7-1 ijLdkj

uke	ijLdkj dk fooj.k
Hkk-d-v-i-&,uvkj l hch	dyh; j] fr: vurije] djy e 17&21 Qjojh 2018 dk vk; kft r jk"Vh; dyk mR lo&2018 eKku d lk>nkj d : ie ^fo" k" k l jguk ijLdkj*
, l- mek	vkbnkbVh] xogkVhe 2 Qjojh 2018 dkvkbvkbVh] xogkVh vkj fxQfo'o fo ky; }kjk l; Dr : i l inku fd; kx; k ^Hkkjr&tki kul oJ"B to l l/ku mi; kx ijLdkj*
vkj- lYojktu	bFM; u QkbV k iFkykft dy l k l k; Vh] iknijx foKku l Hkkx] Hkk-d-v-l] ub fnYyh }kjk ^th l kfuuf/k ijLdkj*
vkbn- jfo	Vh, u, l vkjvk %rfey ukM l kbVfQd fj l p vxukbt 'ku] Vh, u, l vkjv k] d pkVj d vrxfokku i l k] foKku ,oik l kfxdh foHkkx] Hkkjr l jdkj] ub fnYyh l lEc) ck l l k l l k l k; Vh dh ^ck l l k l l k l k; Vh v/; rko fUk*
d-, u- f'kok	bFM; u l k l k; Vh vkQ , xidYpjy bthfu; l] ub fnYyh }kjk 8 tuojh 2018 dk ^dy d Nneru d ckgjh vkPNn l jL l hcuku d fy, midj.k d idt d ek/ ; e l m e'khyrk dk fodk l * 'kh"kd d vul/kku i= d fy, ^loJ"B i kLVj ijLdkj*
Mh- jket; e	Hkk-d-v-i-&vkbnkb, pvkj] cxy: e 5&8 flrEcj 2017 dk ^ckxokuh % ikFkfedr k, vkj mHkjr h gb io fUk; k ij vrj k"Vh; flEikft; e* e ^pkfixcdV&ryrkM d e[; ru d fy, , d 0; kogkfjd ; fDr 'kh"kd d vul/kku i= d fy, ^loJ"B i kLVj ijLdkj
l h- vujk/kk	f'k{kk , o if'k{k k foHkkx] vkLVfy; k b l jdkj }kjk ^, Moj Qykf'ki&2018*
vkj- rxoy	LoPN Hkkjr dk; Øee ; kxnku nu d fy, LoPN Hkkjr fe'ku o" kxkB d nkjku
, l- ckfdd; jkf.k	^mR d"V fu" ikndijLdkj*
l h- vujk/kk	
ch- l rh'k	

7-2 I Eeku

oKkfud dk uke	fooj.k
, l- mek	l nL; &jkT; l eLo; u l fefr] rfey ukM l nL; &Hkkjr h; [kk] i l lDj.k ik l kfxdh l lFkk] r tkoj dk 'kk l hfudk; l nL; &vk/k in'k [kk] i l lDj.kdk; cy l nL; &ft ykckxokuh fe'ku] fr: fPpjkiYyh rfey ukM l jdkj] Vh, u, ;] l h vkb vkb vk jHkk-d-v-i-&, u vkj l h ch }kjk , l h vkj vkj vkb %Vh, u, ;] enje 21&22 tykb 2017 d nkjku l; Dr : i l vk; kft r ^jk"Vh; dykmR lo* evk; ktu dh l g&l k>nkj l nL; &Mhu d p; ugrp; u l fefr] Vh, u, ;] dk; EcUkj Hkk-d-v-i-&vkbnkb, pvkj] cxy: e 6&7 flrEcj 2017 dk vk; kft r ^ckxokuh ij vrj k"Vh; flEikft ; e* e0; k[; kunu d fy, fo" k" k vke=.k ftuok] LohV t j yMe 7&11 uoEcj 2017 d nkjku vk; kft r ^, Q , vk of'oddykdfe; k d flEikft ; e* evkef=r oDrk

okkfud dk uke fooj.k

	Hkk-d-v-i-&,uvkj lhch] fr : fPpjkiYyhe 19&20 fnlEcj 2017 dkvk;kftr Hkk-d-v-i-&,vkb lhvkj ih %Qy% ijD;vkjVhcBdevkef=r lnL; vkbvkbVh] xogkVh] vlee 1&3 Qjojh 2018 d nkjku ^tol lk/kuk d mi;kxijHkkjr&t kiku f}i{kh; flEikft;e* d rduhdh l= e v/ ;{krkdjurFkkfo'k"ko;k[;kunu d fy, vke=.k Hkk-d-v-i-&,uvkj lhch] fr : fPpjkiYyhe 15&18 Qjojh 2018 dkvk;kftr ^Hkk-d-v-i-&,vkb lhvkj ih %Qy% dh legppk* dk lQy : i l lpkfyrdju d fy, l;ktulfehr dh v/;{k Hkk-d-v-i-&lh ih lhvkjvkb] dljxkMe 20 Qjojh 2018 dkvk;kftr ^Hkkjr&vYhdhf'k[kj if'k{k.kdk;Øe* efo'k"ko;k[;kunu d fy, vke=.k ,plhvkvkvkvkb %Vh,u,; %] dk;EcÙkje 5 ekp 2018 dkvk;kftr Hkk-d-v-i-}kjik;kftr vYi ikB;Øee ^dyet ofofo/krk* ijfo'k"ko;k[;kunu d fy, vke=.k Hkk-d-v-i-&,uvkj lhch] fr : fPpjkiYyhe 21 fnlEcj 2017 dkvk;kftr ^dye ¶; tfj;e e>kujkx& m".kdfvc/kh tkfr&4 ij ,d fno lh; ppk d lelo;d bVju'kuy ;fu;uQkj d to'kuvkQupj %vkb;lh,u% itkfr l j{kk lfefr] of'oditkfrdk;Øe d vrxr ^ymhcmfo'k"K leg* d vkef=r lnL; tuok] LohVtjyMe 7 l 10 uoEcj 2017 rdvk;kftr oYM cucukQkje d rrrh; of'od lEeyueHkkxyu d fy, n'k dk ifrfuf/kRodjugr Hkk-d-v-i-}kjikfrfu;Dr Hkk-d-v-i-&,uvkj lhch] fr : fPpjkiYyhe 15&18 Qjojh 2018 dkvk;kftr ^,vkb lhvkj ih %Qy% dh ikpohokf"kd legcBd d l;kt d ,lhvkjvkvkvkb %Vh,u,; %] enje 21&23 tykb 2017 dkvk;kftr jk"Vh; dykmR lo 2017 e ^dyeJ"Bdf"kfof/k;k* ijrduhdh l= d lg&v/;{k Hkk-d-v-i-&,uvkj lhch] fr : fPpjkiYyhe 21 fnlEcj 2017 dk ^¶; tfj;e>y l k m".kdfvc/kh tkfr&4 l lcf/kr l?kj/k rFkk to l j{kk d enn % Hkkj redy dh [krhe ,d mHkjrkgvkl dv* fo"k; ijvk;kftr i jke'knk=h cBdefji kfV;j fnukd 6&12 vxLr 2017 dkl enekx l ekyHktu d fy, dkPphcnjxkg l ncb rdHkt x, ^uUnu* dy dh idcnh dh fuxjkudju o m l d kfujh{k.kdju d fy, ncbeifrfu;DrA ekuuh; dUnh; df"k ,ofd l kudY;k.ke=h] Hkkjr l jdkj }kj kubfnYyhev;k;kftr Hkk-d-v-i- d LFkk iukfno l d vol j i j t kjh dh xbofo"kk.kigpku d fy, fMi&fLVdijh{k.kdfdV dk fodk l bfM;uQkbVkiFkkykft dy l k l k;Vh d o"k 2018 d vkpfyd v/;{k %nf{k.kh vpy% d : ieukfer ,ofuokfpr fuÙkfo'ofokjy;] exykje 7&9 fnlEcj 2017 dkvk;kftr bfm;uokbjkykft dy l k l k;Vh d 26o okf"kd lEeyu %ohjd ku&2017% evk;kftr rrdudh l= dh vk;ktulfehr d lnL; vkjdfFkr rduhdh l= d v/;{k Hkk-d-v-i-&,uvkj lhch] fr : fPpjkiYyhe 15&18 Qjojh 2018 dkvk;kftr ,vkb lhvkj ih %Qy% dh 5oh okf"kd legcBd d l;kt d ckg; fo'k"K] Hkk-d-v-i-&vkbvkb,pvkj] cxy : dh vkbch, l l h lfefr bVju'kuy tuyvkQ ,xh dYpyj l kbfl l 'kh"kd tuy d , l kfl ,V l Ei kn d
, l-mek vkj- rxoy t- ijkfu	
vkj- rxoy	
vkj- rxoy d-,u- f'kok vkj- lYojktu	
vkj- lYojktu	
,e- eby okxuu	



oKkfud dk uke fooj.k

vk-b- jfo	eKvify;j] ÝkIe 12&15 fnIEcj 2017 dKvk;kftr ^E; lkvkuof'kd l k/kuk dk eY;kdu* fo"K; ijvk;kftr of'odE; lkvkuof'kd l k/kuk d uVod dh dk;'kkykefo'k"kvke=.k o"K 2017 ebfrg l d ldk; l nL; rFkfgUnhvf/kdkjh dh Hkrh d fy, rfeyukMdUnh; df"fo'ofok ky;] fr:o:jep;ulfevr d l nL;
oh- dekj	, lhvkjvkjvk b %Vh,u,; %] enje 21&23 tykb 2017 dKvk;kftr jk"Vh; dyk mR lo&2017 d l Eeyulfevr d l nL; , lhvkjvkjvk b %Vh,u,; %] enje 21&23 tykb 2017 dKvk;kftr jk"Vh; dyk mR lo&2017 e ^dyeJ"Bdf"kfok/k;k* fo"K; ijrduhdh l = d lg&v/;fk vur i jke] vk/kin'ke 5 uoEcj 2017 dKvk;kftr ^m".kdfVc/khQyk&dykvkjvukji jKku dh Hkxhnhkj* i jdk;'kkykevK;kftr rduhdh l = d iuy l nL; Hkk-d-v-i-&, uvkj l hch] fr : fPpjkiYyhe 15&18 Qojh 2018 dKvk;kftr , vkb l hvkjih %Qy % dh 5oh okf"kd legcBd d l ;ktd
d-,u- f'kok	d,;] oYykfudkj] f='kj] djye 28 fnIEcj 2017 dKvk;kftr ^df"ki l Ldj.k ,oeY;o/ kuijvrjjk"Vh; in'kuh , odk;'kkyk %oh,vkbth,&2017% d lg&v/;fk
Mh- jket;e	tuy l kbV;kgkVhdYpj ,Y l fo;j] ,eLVMe] n uhnjyM l d fy, y[kk dh leh{kk emRd"V ;kx nku d fy, iek.k&i= inkufd;kx;k tuybVju'kuytuyvkQ ,xhdYpj l kbfl l d fy, cgeY; , l kfl ,V l i knd d : iel nL; rkiek.k&i=
lh- vujk/kk	bVju'kuy l k l k;VhvkQ :V fj l p %vkb,l,l,vkj % dh ekunvkt hou l nL;rkvkt hou l nL;] bfM;uok;jkykfttdy l k l k;Vh l i kndh; l nL; &bVju'kuytuyvkQdjVfj l p ,MMoyiev
ih- fxfjckc	bfM;utuyvkQlykVikVD'kud fy, l kFkh leh{kk eJ"Brk dk iek.k&i= Hkk-d-v-i-&, uvkj l hch] fr : fPpjkiYyhe 20 fnIEcj 2018 dkQykijvk;kftr Hkk-d-v-i-&, vkb l hvkjih d D;vkjVhny d eY;kduij l = d fy, fjikfV;j Hkk-d-v-i-&, uvkj l hch] fr : fPpjkiYyhe 21 fnIEcj 2018 dkdKvk;kftr ^¶;tfj;e e>ku m".kdfVc/kh tkfr&4 % Hkkjredy dh [krh d fy, ,d mHkjrkgvkl dV l lcf/kr l xjk/k vkjto l j{kk* i j i j k e'knk=h cBd d fjikfV;j

8 IIdl ,olj;kx

ifj;k tuk dk 'kh"kd	Ig;kxh I LFku
eY; J[kyic/k] dy d fu;krelgk;rk] tfodmRiknurFkk0;FkinkFkk d mi;kx dh fn'kkeik kfxfd; kfodfl rdjue ^Kku l k>nkj* bVuf'ki rFkkLukr dkUkjvu l /kkudk; ØekeN k=kdk l phc) djrg, df"q] uukik kfxdhrFkkvU; {k=keNk; kdui .kkfy; k] byDVkfud ;fDr; k] I kjÅtk d vui; kxk dk fodk l dy d mRiknu ,oeY; o/ku d fy, fofHkUumidj.kk dk fodk l dy d rM x, xPNk d ifjogu d fy, uk'kd thok dh igpku] oguh; dcyd kjduo; ji.kkyhgr toll jk o Nk; kduik kfxdh dk fodk l rFkk l kj 'kfDr ,ovU; {k=k d mi;kx d ek/;e l gfjr ik kfxdhdk c<koknuk [kkMhn'kkdk lenekx l dykHk tu d fy, ikVkd ky dk fodk l ifjrmRifjorutuu d ek/;e l j l Fkyh ¼, ,ch½ e ¶; tfj; e >ku d fo#) LFkk; hifrjk/k l ;Drv&jk l k; fudmRifjordk dk fodk l dye l l; kUkjgkf; k dk eY; kdu vYhd k d egk>hyk d {k= eNkVh tkr d fd l kuk d fy, dy dk l /kkj& ¶; tfj; e e>ku&ifrjk/khfdLek d fodk l d }kjkd y dk mRiknu c<kuk rFkkvYhdhNkV tkrnkj k d l kFkykHk l k>nkjh	vk/kin'k l jdkj ,uvkbVh] fr : fPpjkiYy] rfeyukM Hkk-d-v-i-& l hvkb, b ¼{k=h; dUn½] dk; EcUkj] rfeyukM d, u l hbVh] FkkfVV; ke] rfeyukM , i hMk] cxy : rFkke l l Q; j , D l i kV l bfM; kfyfeVM] dkfPp Mh, b] eEcb] egkj k"V t yxko] dUukj k vkj d kmojeQydUnk i j Hkk-d-v-i- &, vkb l hvkj i h vkbvkbVh,] ukb t hfj; k(ck; kof l VhbVju'kuy] Yk l (, u, vkjvk] r tkfu; k(eyk; kfo'of o ky; (, l, y;] LohMu(LVyuck'kfo'of o ky;] nf{k.kvYhd k(dkuyfo'of o ky;] ; , l, (d; , y] cfyt; e(Doh l y Mfo'of o ky;] vkLV fy; k(uY l ueMykvYhdubLVhV; 'kuvk Q l kb l , MV Duky k t h] r tkfu; k(bLVhV; Vvk Q , D l ifjeVyckVuh] pdx.kj kT; rFkk , Eck i k] ck t hy

mUkjiohjkT; k d fy, MhchVh&,ubvkjdydkd; Øe d vrxrLohdrifj; k tuk,

ifj;k tuk dk 'kh"kd	Ig;kxh I LFku
Hkkjrh; dykvkuof'kd l l k/kuk d ic/ku d fy, d l kfv; e mUkjioh {k= l dy d vkuof'kd l l k/kuk dk l dyu] eY; kdu] iy[ku ,olj{k.k	fetkjefo'of o ky;] , toky] fetkje Hkkjrh; ik kfxdh l LFku] xogkVh] v l e rfeyukMdf'kfo'of o ky;] dk; EcVj



ifj;k tuk dk 'kh"kd

mÙkjioh Hkkjr e dy k l l k/kuk ij fofo/krk dk eY;kdu] tuun0; l j{k.k vkj MVkcl

dy dh ifrcylfg".kfdLek d l Ei.k thuke rFk kVklfØIVke dk v/; ;u

fo"kk.kdk ukfdxvkmV&l h vkj vkb ih , l ih vkj & Cas9i.kk y h l thuke l Eiknu d ek/; e l dy l n l hdyk /kkjh fo"kk.kØek dk fu"dklu

dyeflxkVkd l Øe.k d fo#) ifrj{kk dk vkf.odfo'y" k.k&flxkVkd ifrjk/kh l dj d fodklgrmÙkjio d E; l ktuun0; dk nkgu

Hkkjr d mÙkjioh {k= edy d xfpNrpm fo"kk.k d ic/k grNAI ; fDr d ek/; e l toik l kfxdhg l r {i

foijh r thui : ike ¶; t f j ; e > y l kifrjk / k r Fk k vkf.od y {k.k&o.ku d fy, mÙkjioh {k= l dy d tuun0; dh NVkb

mÙkjioh {k= edy d uk'kd tholdy dh fofo/krk dk fo'y" k.k] thukehr Fk k Vkl fØIVke i k Q k b f y x v k j Q kbVkl fe ; kdfedy

mppeY; d iorh; {k= okydy dk Loik= ogriekuij io/ku

mÙkjioh dy kfdLek e ifr e / kegr Fk k j k x j k / kh&ekM ; yVjhx.kk d mppeY; okyiknij l k ; uk dk y {k.k&o.ku

r k t d y d fy, io , oi'prMkb xPNk n [kHkkyic/k l c / khfof / k ; k dk fodkl

Hkkjr d mÙkjioh {k= ei'kvk d fy, vkgkj d : iedy d vif'k"V d vkuof'kd l l k / ku dk eY;kdu] LoLFkkul j {k.k , oiHkko

dy dk eY;o/k uvk j U ; urei l Ldj.k ik l kfxdh d ek/; e l e?kky; d vkfnok l h lenk; eNkVieku d m l ek dk l tu

mÙkjioh Hkkjr e dy dh of) efuEurkieku dk ic/k rFk enkueh dh dehlc/kh ifrcy

ikdfrdj'kkfudkyu] j'kijvk/kkfjrmRiknk] toek=k d fcdVcukurFkmi ; kx ; kX ; ; kfxdk d fy, dy d vif'k"V d mi ; kxgrMkmulVhei l Ldj.k

lg;kxh l LFkku

Hkk-d-v-i-&Hkkjr h ; c k x o k u h v u l / k k u l L F k k u] c x y : bLVhV ; V v k Q , M o k L M L V M h t b u l k b l , M V D u k y k t h % v k b , , l , l V h % x o g k V h] v l e

Hkk-d-v-i- & mÙkjioh iorh; {k= d fy, vul / kku ifj l j] mfe ; e] e?kky;

, u - o h - i V y d k y t v k Q l ; k j , M , l y k b M l k b l] x t j k r m R d y f o ' o f o | k y ;] H k o u ' o j] v k f M ' k k

f = i j k f o ' o f o | k y ;] l ; e f . k u x j] f = i j k

j k " V h ; o k u L i f r d v u l / k k u l L F k k u] y [k u Å

t o k g j y k y u g : m " . k d f V c / k h o k u L i f r d m | k u , o v u l / k k u l L F k k u] f r : v u r i j e

d k f g e k f o K k u e g k f o | k y ;] t k V l k e k] u k x k y M

u k x k y M f o ' o f o | k y ;] e n > h Q e k] u k x k y M

f c / k k u p U n d f " k f o ' o f o | k y ;] d Y ; k . k h] i f ' p e c x k y

i V d f Ø f ' p ; u d k y t] n h e k i j] u k x k y M

u k F k b L V u j h t u y b L V h V ; V v k Q l k b l , M V D u k y k t h] f u t y h] v # . k k p y i n ' k

u k x k y M f o ' o f o | k y ;] y e k e h] u k x k y M

x k g k V h f o ' o f o | k y ;] x o g k V h] v l e

V h b v k j v k b L d y v k Q , M o k l l k b f l l j u b f n Y y h n , u t h , M f j l k l b L V h V ; V] u b f n Y y h

Hkk-d-v-i-&jk"Vh; ikni vkuof'kd l l k / ku C ; j k] u b f n Y y h

ih, l thdkyt vkQVDuky k th] dk; EcÙkj

df"kegkfo | ky ;] yEcpjk] f = i j k

{k=h; ikni l l k / ku dUn] Hkou'oj] vkfM'kk

Hkk-d-v-i-&mÙkjioh iorh; {k= d fy, vul / kku ifj l j] u k x k y M

dUn&nhekij] ukxkyM

t o k g j y k y u g : f o ' o f o | k y ;] u b f n Y y h

i f ' p e c x k y j k T ; f o ' o f o | k y ;] d k y d k R r k

mÙkjioh iorh; {k= d fy, Hkk-d-v-i- vul / kku ifj l j] e f . k i j d U n] b E Q k y] e f . k i j

ifj;k tuk dk 'kh"kd	lg;kxh I LFku
	f l fDde fo'o fo ky;] xxVkd] f l fDde x#ukudno fo'of o ky;] ver l j] i t k c mÙkjiohiorh; fo'of o ky;] rjkifj l j] e?kky; V k l u'kuy gYFk l kb l ,MVDuky k t h bLVhV;V] Qj hnkckn v l eMkmuVkm u ;fuof l Vh] xogkVh] v l e bLVhV ;V v k Q y k b Q l k b l] Hkou'oj] vkfM'kk Hkkj r h; i k k f x d h I L F k k u] [k M x i j r t i j f o ' o f o k y ;] u k i e] v l e i ' k f p f d R l k f o K k u e g k f o k y ;] [k k u i k M k] x o g k V h j k " V h ; i k n i v k u o f ' k d l l k / k u C ; j k & { k = h ; d U n] f ' k y k x j k " V h ; i k n i v k u o f ' k d l l k / k u C ; j k & { k = h ; d U n] g n j k c k n



9 idk'ku

9-1 vu l/ku i=

vrjjk"Vh;

ekLVV Mh-] ekfyuk , -ch-] Mfu;YI t-] Qkmjhb t h] gekV k I h] d kvk I h i h] Qcxj b] flukfgu oh t h] ekLMd ,u] rxoy vkj] y h I h] ;h t h] ekLVV ,y vkj foYtkbu , - 2017- n fMfLVC; 'ku ,M gkLV j t vkQ cukuk ¶; tfj;e foYV QxI] ¶; tfj;e vkDI hL ikje ,Q- , I i h- D; c I - , f'k; k i h, yv k, I ou- 12%7% b0181630- Mhvk vkb%10-1371-

undekj ,] eby oxuku ,e] Injjkt ih vkj mn; dekj vkj- 2017- QkbV kdfedy , ukfyf l l , M fueVh I kbMy , fDVfoVh vkQ bFkukfyd y hQ , DI VDV I vkQ MVjk eVy] MVjk buk fDI ; k , M cxef l ; k I vkfo; kyf l l vxLV eyk bMx k bu bu d k x u h V k - , f'k; k tuy vkQ ck; k I kb f l l 2%4% 1&11-

undekj ,] eby oxuku ,e] Injjkt ih vkj mn; dekj vkj- 2017- fueVh I kbMy , fDVfoVh vkQ , Do I y hQ , DI VDV I vkQ MVjk eVy] MVjk buk fDI ; k , M cxef l ; k I vkfo; kyf l l - vejdu tuy vkQ , Vkekyk t h- 1%2% 39&45-

ukjk; .k I h d] t ; HkkLdju dt vkj eLrQk , e, e- 2017- dfedy , M feujy dEikft 'ku vkQ Qkj dYVhoI vkQ cukuk %E; I k , I i h% fcyk fxx V fMQjV t hukfed x l l] xku bu b f M ; k - bVju'kuy tuy vkQ d j V e k b Ø k c k ; k y k t h , M , I y k b M I k b f l l - 6%9% 2862&67-

ijkuh t- 2017- LVVgkj l , I i h i h % d k f y ; k I V j k % d k d h u f y M h % i h M V j h v k u f l t k V V k u k b d l f g n L r k u h d l % f g L V % , d j h % V k u k b f d M h % Y k e I k m F k b f M ; k j b U D y f M x , U ; L i h I h t , M , U ; f l u k f u e h b u b f M ; u L V V g k j l - t V D I k j 4277%4%]

Mhvk vkb ¶ http://dx.doi.org/10.11646/Zootexa,4277-4-9J

odVjeu , I] i l k n c h o h , y , I v k j I Y o j k t u v k j - 2018- v k j , u , f M i M V v k j , u , i k y h e j t l % b l k b V I Y k e L V D p j Q D ' k u y , M , o k Y ; ' k u - o k ; j f l l - 10%2% http://doi.org/10.3390/v10020076-

;kno , I d ;] f l g t] i n u k H k u c h v k j d e k j , y , I - 2017- t u f V d o f j , f c f y V h b u b f M ; u i k i y ' k I v k Q c u k u k d k e f o f o y] d k L e k i k y k b V I I f M M I % d k f y ; k I V j k % d j D ; f y ; k f u M h % , I L M c k ; v k j , i h M h , I , M , , Q , y i h , I - b V j u ' k u y t u y v k Q V k f i d y b u l D V I k b l - 37%3% 149&162-

jk"Vh;

,fy; kckyu , I] l c e . ; e , I] I Y o j k t u v k j - 2017- d k L V D ' k u v k Q c h c h V h o h j i t h u R N A i o D V j , M b o Y ; , V n I k b y f l x e d f u T e F k b t D ' k u v k Q , x k c D V h f j ; e V ; e Q f l ; I V k f t , V , D I i l u f l L V e b u c h c h V h o h b Q f D V M f g y c u k u k I y k V I I h o h - f o : i k { k h % , , c h % - b f M ; u t u y v k Q u p j y I k b f l l] 7%42% 12395&12403-

ijkuh t- vkj Fkkuhxjkt vkj- 2017- QLV f j i k V v k Q , U d k f l ; k f M L i l k i k y k L t d % g k b e u k I V j k % , Q f y f u M h % , t , i j k f l V k b M v k Q : x k t L i k b j f y x O g k b V ¶ I y k b] , Y ; j k f M d l : f x ; k i j D ; y V I e k f V u % g f e l V j k % , y b ; j k f M M h % , f j I V b U o f t x i L V b u b f M ; k j f o n u k V I v k u b V I i h M V I - t u y v k Q c k ; k y k f t d y d V k y j 31%1% 1&4] Mhvk vkb ¶ 10-18311@jbc/2017/16263-

jfopkeh i h-] undekj , I v k j f l o c k y u d I h - 2017- V y h f o t u Q k j b Q f D V o f M I f e u ' k u v k Q Q k e b Q k e ' k u V c u k u k x k v I % , L V M h Y k e r f e y

ukM- *ikxflo fjlp &,u bVju'kuy tuy-*
12%1146&1149

jfopkeh ih] flockyu dIh] Ice.;e ,vkj vkj
undekj , l- 2017- ,u ,DllykjfVo LVMh vku
dE;fud'ku fcgfo;j vkQ cukuk xkvI bu
fr : fPpjkiYyh fMfLVDV vkQ rfey ukM- *tuy*
vkQ QkekdkukIh ,M QkbVkdfeLVh- 6i319&323

IYojktu vkj] ckyk Ice.;e oh] toHkkLdju dt
vkj eLrQk ,e,e- 2017- ;hYM ykI euteV Fk
QfVybktj bu cukuk cDV ektd ok;jI ,QDVM
YpIykVbu Iho- uUnu % , ,ch] *bFM;u tuy*
vkQ ,xhdYpjy Ikbfl I] 87%8% % 1055&61-

9-2 ykdfi; y[k

vujk/kk Ih- vkj y{eh d- 2017-
Ihvkjvkb, Ihvkj&Ih, ,I 9 & , U; thuke
,fMfVX Vy- [https://www.scribd.com/
document/372426499/7-CRISPR](https://www.scribd.com/document/372426499/7-CRISPR).

vujk/kk Ih vkj y{eh d- 2017-
Ihvkjvkb, Ihvkj@Ih, ,I VDukykt h Qkj
lykV thuke ,fMfVX. [https://www.scribd.com/
document/372426068/6-Crispr-Cas9Plant](https://www.scribd.com/document/372426068/6-Crispr-Cas9Plant).

t;HkkLdju dt vj mek , l- 2017- xk/kh enku]
efndjh] dx e 20&21 eb 2017 dk Ih,pb, I]
Hkk-d-v-i-vkbvkb,pvkj] pVh }kjk ^vkn mik'.k
ckxokuh Qlyk ij jk"Vh; I Eeyu % fVdkÅiu
d fy, fofo/khdj.k* fo"K; ij vk; kft r I Eeyu
d nkjku ^vkn m".kdFVc/kk e dy dh [krh &
I Hkkouk, ,o {k=* ij e[; vul/kku i=k dk
IhMh&jke tkjh fd;k x;kA

t;HkkLdju dt] mek , l vkj fiVpeFk vkj- 2017-
ok>hby ikFkFkh iIkuee] IkRruhj iIkukee
& vk: vkliM %rfey e% %vklykou flpkb
cuke fmi flpkb & ,d ryuk] dy e% oukyh
vk>kokdy ekujk IbrhdkFkj] 10% 19&21-

t;HkkLdju dt] mek , l vkj fiVpeFk vkj- 2017-
ok>hby dkFkdk IkFkfgu vkokfI;e %rfey e%
%dy e x/kd ik"kd rRo dk egRo%] oukyh
vk>kokdy ekujk IbrhdkFkj] 12% 19&21

inukHku ch vkj mek , l- 2018- o>gkb ddfyby d
ifuu FkDde bikMey ,Rrekrh FkKje o;uFkdk
i : oFk ,likMh\ %rfey e%] oukyh vk>koj Ikxk
Ibfkd dkFkFkj] eksp 2018] e-i-37

f'kockyu] dIh] LokfeukFku ch vkj jfopkeh ih- 2017-
IfoI vkQ ekckby ,II %vkbIhVh% bu LekV
,xhdYpj vMj DykbeV pt- oukyh vk>koj
Ikxk Ibfkd dkFkFkj %rfey e%] tu 2017] e-i-
41&44-

9-3 iLrd@iLrd v/;k;

vujk/kk Ih vkj IYojktu vkj- 2018- ikfV;kfeDI
bu vMjLVfMx gkLV&ok;jI bVjD'ku- lykV
ok;jfI l- MkbofI Vh] bVjD'ku ,M euteV e-
xkM vkj-d-] [kjuk , l vkj Mkjk[kko okb
%liknd%] IhvkjIh il- e-i- 217&237-

ineukHku ch- 2018- iLVI bu cukuk- ,xhdYpjy
,Vkeykth e vkdkj %liknd%- flixj oykx]
flxki] vkb, lchu 978-981-10-8686-1.

IjLorh ,e, I] dfy;kikef.k d] mek , I] cdh;kjuh
, l- 2018- fØVdy boY; 'ku vkQ nj cufQVI
,M fjLDI vkQ tufVdyh ekfMQkb gkVhdYpjy
Øk/I- tufVd bthfu;fjx vkQ gkVhdYpjy
Øk/I- jkmr] thth] ihVj doh %liknd%] ,dMfed
iI] ,Ylfo;j] e-i- 315&351-

IYojktu vkj- ckyk Ice.;u oh vkj vujk/kk Ih-
2018- ikiy'ku LVDpj ,M Mk;ofIVh vkQ
cukuk cph Vki ok;jI ,M cukuk cDV ektd
ok;jI- lykV ok;jfI l % Mk;ofIVh] bVjD'ku
,M euteV- xkM vkj-d-] [kjuk , l vkj Mkjk[kko
okb %liknd%] IhvkjIh il- e-i- 149&170



IYoikt u vkj] fcdk l eMy] ckyk l ce.; u oh] verk cut h] fot; unjkt , l vkj veyUn ?kk"k- 2017- ck; kyk t h , M ekyhD; yj ck; kyk t h vkQ ccok; jfl l vdfjx bu bfM; k- , l pjh vkQ lykV ok; jkyk t h bu bfM; k- eMy ch] jko thih] cjuoky oh vkj tu vkj ¼ l iknd½] flixj] e-i- 27&48-

f'kok d, u] eLrQk , e, e vkj vkfn; keku ih- 2017- cukuk- gkVhdpjy l kb l l & i l ifDVo , M , lyhd'k l e- ihVj doh ¼ l iknd½- fcfy; u ifcyf'kx] ub fnYyh] Hkkjr }kj k idkf'kr] e-i- 407&416-

rxoy vkj vkj IYoikt u vkj- 2018- bfVxfVM iLV euteV & cukuk- gMcd vkQ bfVxfVM iLV euteV e- pVki k/; k; l h-] roj vkjd] lgxy , e] fcjg ,] Hkxr , l] vgen , u vkj egrk , u- ¼ l iknd½] Hkkjr h; df"k vul/kku ifj"kn] e-i- 664&678-

rxoy vkj] xxknoh ih vkj IYoikt u vkj- 2017- fmft t l vkQ cukuk , M n; j euteV- fmft t l vkQ dkef'k; y Øk l l bu bfM; k e- ¼ l iknd½ xkre , pvkj vkj xlrk , l d- fu; kVh cd , t l h ikboV fyfeVM] ub fnYyh e-i- 321&337- ¼ vkb, l ch, u h 978&81&935&8229&9%.

9-4 oKkfud l eh{kk, @rduhdh cyfVu@foLrkj QkYMj@rduhdh QkYMj@rF; & i=@ifronu vkfn

t; HkkLdju d t] fifp; keFk vkj- vkj l dj Vh- 2017- fj l kbfDyx vkQ jft M; bu cukuk Qke ¼ rfey e- rduhdh QkYMj l [; k 10] Hkk-d-v-i- & jk"Vh; dyk vul/kku dUn] fr : fPpjkiYyh] rfey ukM

eby oXuku , e-] jfo vkb vkj mek , l- 2017- U; VVo oY; t , M gYFk cufQVI vkQ cukuk lykV- rduhdh QkYMj l [; k 33] Hkk-d-v-i- & jk"Vh;

dyk vul/kku dUn] fr : fPpjkiYyh] rfey ukM e-i- 36-

f'kok d, u] eby oXuku , e] l j'k dekj ih] ekfjeFk , u] t; HkkLdju d t vkj mek , l- 2018- oY; , fMM ikMDVI vkQ cukuk , M n; j U; VVo oY; l- rduhdh QkYMj l [; k 35] Hkk-d-v-i- & jk"Vh; dyk vul/kku dUn] fr : fPpjkiYyh] rfey ukM e-i- 43-

f'kok d, u] l j'k dekj ih] ekfjeFk , u vkj mek , l- 2017- fj l V , Mokf l l bu ikLV gkoLV d; j vkQ cukuk ¼ rfey½] foLrkj QkYMj l [; k 24] Hkk-d-v-i- & jk"Vh; dyk vul/kku dUn] fr : fPpjkiYyh] rfey ukM

rxoy vkj vkj mek , l- 2017- Vkfidy j l 4 & , fo: yV LVu vkQ ¶; tfj; e foYV vQfDVx bfM; u cukuk ¼ fgUnh½ vkj vxt h½ dyk dodh; rF; i= l [; k 2 vkj 3] Hkk-d-v-i- & jk"Vh; dyk vul/kku dUn] fr : fPpjkiYyh] rfey ukM

rxoy vkj vkj mek , l- 2018- ¶; tfj; e foYV ¼ Vkfidy j l 4% & , fMLVfDVo fmft t vkQ cukuk bu bfM; k ¼ vxth vkj fgUnh½] rduhdh QkYMj l- 11 vkj 12] Hkk-d-v-i- & jk"Vh; dyk vul/kku dUn] fr : fPpjkiYyh] rfey ukM

rxoy vkj vkj mek , l- 2018- ¶; tfj; e foYV ¼ Vkfidy j l 4% & , u beftx FkV V cukuk dYVho'ku bu bfM; k ¼ vxth vkj fgUnh½] foLrkj QkYMj l- 25 vkj 26] Hkk-d-v-i- & jk"Vh; dyk vul/kku dUn] fr : fPpjkiYyh] rfey ukM

mek , l] eby oXuku , e] l jLorh , e, l] l j'k dekj ih vkj fxjh ckc ih ¼ l iknu½- 2018- l D l l LVkj h l ¼ ¶yxf'ki VDukyk t h vkQ vkb l h, vkj & , uvkj l hch- rduhdh cyfVu l- 34] Hkk-d-v-i- & jk"Vh; dyk vul/kku dUn] fr : fPpjkiYyh] rfey ukM e-i- 55-

9-5 if'k{k.k euvy

dekj oh vkj mek , l- 2017- gkb Vd cukuk dYVho'ku Qkj bUgkflx n ikMD'ku ,M ikMfDVfoVh vkQ DokfyVh cukuk l- Hkk-d-v-i- & jk"Vh; dyk vul / kku dUn] fr : fPpjkiYyh] rfey ukM

lYojktu vkj vkj ckyk lce.;u oh- 2018- dfVx , t ekyhD; yj Mk; XukfLVd VDuhDI Qkj ok; jfl l vQfDVx cukuk ,M lyVu- Hkk-d-v-i- & jk"Vh; dyk vul / kku dUn] fr : fPpjkiYyh] rfey ukM] e-i- 155-

f'kok d,u vkj ekfjeFk ,u- 2017- VDuhdy uk&gkm l vkQ ^cukuk fQx* ,M ^cukuk fYkj cLM cch QM*- Hkk-d-v-i- & jk"Vh; dyk vul / kku dUn] fr : fPpjkiYyh] rfey ukM

f'kok d,u] l j'k dekj ih] mek , l vkj ekfjeFk ,u- 2018- ikMD'ku vkQ oY; ,fMM ikMDVI Ýke cukuk- Hkk-d-v-i- & jk"Vh; dyk vul / kku dUn] fr : fPpjkiYyh] rfey ukM

f'kok d,u vkj ekfjeFk ,u- 2018- VDuhdy uk&gkm vkQ ^cukuk fYkj ,M fYkj cLM cchQM* ,M ikLV gkoLV gMfyx] idftx ,M LVkj t vkQ cukuk fYkoj*- Hkk-d-v-i- & jk"Vh; dyk vul / kku dUn] fr : fPpjkiYyh] rfey ukM

9-6 vul / kku i=@ ljk'k@ lEeyuk@ lxf'B; k@ lfeukj@dk; 'kkykvk vkfn e lLrrhdj.k

9-6-1 vrjjk"Vh;

cdh; kjuh , l] mek , l] ekfj; kMk l ,] lYojkt oh- njkuh ih vkj l jLorh ,e, l- 2017- ck; kQkfVfQd'ku vkQ cukuk Qkj djKVukbM Fk do'kuy chfMx , ikpA Hkk-d-v-i- & vkbvkb, pvkj] cxy: e 5&8 fl rEcj 2017 d nkjku vk; kft r cxxokuh % ikFkfedrk, ,o

mHkjr h gb ioFÜk; k* fo" k; ij vrjjk"Vh; flEikft; e e] e-i- 205-

cdh; kuh , l] mek , l] lYojkt oh] jket; e Mh] njkuh ih] l jLorh ,e, l vkj eLrQk ,e, e- 2017- dM n lykbMh yoy vkQ cukuk ch fMVeV cLM vku LVkeVy Vh; Y l \ vkbfcM- e- i- 2004-

fxjhck ih] vujk/ k l h] inukHku ch vkj vfurk Jh Vh- 2018- ekyhD; yj djDVjkb t'ku vkQ , VkeiFk tfud fueVkm] jfCMV l j bub dkVh ,M vkLchd] 2005 ,M bVI , fQd l h vxLV cukuk Lve ohfoY- , l h vkj vkjvkb %Vh, u, ; %] fdYyhdye] rfey ukM e 29&31 tuoJh 2018 d nkjku to fu; =.k ,o fVdkÅ dhVuk'kd tho ic/ k ij vk; kft r vrjjk"Vh; flEikft; e %vkb l hch, l & 2018% eA

dYiuk , l] Jhfuf/ k Vh] inek ihvkj] mek , l] mek jket; u Mh vkj fueyk noh vkj- 2017- bu foVh LØhfux vkQ cukuk dYVho l Qkj , fVfyfFk; kfVd ikVf'k; y- Hkk-d-v-i- & vkbvkb, pvkj] cxy: e 5&8 fl rEcj 2017 d nkjku cxxokuh % ikFkfedrk, ,o mHkjr h gb ioFÜk; k fo" k; ij vk; kft r vrjjk"Vh; flEikft; e eA

dUuu th] l jLorh ,e, l] rxoy vkj vkj mek , l- 2017- , fEc; k tfud ly l Li'ku %b l h, l % & , ikVf'k; y , D llykV Qkj n MoyieV vkQ uku dkbejy E; VVI fon f; tfj; e foYV jftLVI bu cukuk l hoh- j l Fkyh % , , ch] flYd % vkbfcM- e-i- 198&199-

dkfrd vkj] dekjoy , e] jke ckj mek , l] cdh; kjuh , l vkj l jLorh ,e, l- 2017- xkFk djDVjflVD l vkQ , fEc; k tfud ly l Li'ku vkQ cukuk %E; / k , l ih i h % vkbfcM- e-i- 202&203-



dforK ,u] lJLorh ,e, l] cFkhukFk ,e] dUuu th] cdh;kjuh , l vkj mek , l- 2017- MoyieV vkQ MkbjDV jhtuj'ku ikVdky Qkj ek l eYVhlyd'ku vkQ cukuk l hoh- m|e ;ftx beP;kj flykky gMI , t- ,D llykV l- *vkbfCM- e-i- 199-*

dekjoy ,e] mek ,e] cd;kjuh , l vkj lJLorh ,e, l- 2017- , dEiyhV ikV;kfed ,ukfyf l l vkQ lkefVd ,fEc;k tuf l l bu E; l k , l ihih- l hoh- j l Fkyh $\frac{1}{2}$, ,ch] f l Yd $\frac{1}{2}$ $\frac{1}{2}$ Yke bfuf'k; y ,D llykV V tehu'ku- *vkbfCM- e-i- 201-*

eby oXuku ,e] jfo vkb vkj undekj , - 2017- : V ikfV;kfeD l fjLilf l l V NaCl LVI ckb , l kYV&l l fVo cukuk thukVki- *vkbfCM-*

eby oXuku ,e] jfo vkb vkj f'kok d,u- 2017- bgkleV vkQ xhu ykbQ vkQ cukuk l ;ftx 1&eFkby l kbDykiki hu ,V ,fEc;V ,M yk VEipl fonkmV ,QfDVx jkbflux ,M DokfyVh- *vkbfCM-*

iyuhpkh , l] inukthku ch] ekby oXuku ,e vkj mek , l- 2017- byDVkfQft ;kykft dy ,M fcgfo; jy fjLilf l l vkQ cukuk l ;MkLVe ohfoy] vkfM;kikj l ykxhdkfy l vkfyfo; j $\frac{1}{2}$ dkfy;kIVjk $\frac{1}{2}$ djD;fy;kfuMh $\frac{1}{2}$ V ,xx'ku Qhjeku] 2&eFkby&4&gIVkuky ,M gkLV lykV dfj;keku] *vkbfCM-*

iyuhpkh , l] ineukthku ch] ekby oXuku ,e] cdh;kjuh , l vkj mek , l- 2017- byDVkfQft ;kykft dy fjLilf l l vkQ cukuk l ;MkLVe ohfoy] vkfM;kikj l ykxhdkfy l vkfyfo; j $\frac{1}{2}$ dkfy;kIVjk $\frac{1}{2}$ djD;fy;kfuMh $\frac{1}{2}$ V eFkby tLekuV] 1&gD l kuky ,M gkLV lykV ,D lVDV-] *vkbfCM- e-i- 492-*

jk t k d] cd;kjuh , l] mek , l vkj lJLorh ,e, l- 2017- ikf l cy jky vkQ fyfxuu bu cukuk Qkj

jftLVI vxLV : V ykbtu fueVkm $\frac{1}{2}$ ifVyd l dkQhb $\frac{1}{2}$ vkbfcM- e-i- 494-

jk t d] jke ckc] mek , l] cfd;kjuh , l] lJLorh ,e, l vkj dekjoy ,e- 2017- MoyieV vkQ ck;kfj,DVj ikVkiVki Qkj ,fEc;k tfud ly lLi'ku dYpj vkQ cukuk $\frac{1}{2}$ E; l k , l ihih- l hoh- j l Fkyh $\frac{1}{2}$ vkbfcM e-i- 200-

lJLorh ,e, l] cFkhukFk ,e] njb ih] dforK ,u] dUuu th vkj mek , l- 2017- LVMht vku n bQDV vkQ LVhfex ,M , t vkQ l d l vku ,D l f l V- eØkikix'ku vkQ cukuk $\frac{1}{2}$ E; l k , l ihih- $\frac{1}{2}$ ojbVht- vkbfcM- e-i- 200-

l j'k dekj ih] f'kok d,u] eby oXuku ,e] jfo vkb vkj ekfjeFk ,u- 2018- ,D l ikV fj tDVI cukuk l hoh- xkM u;u , t , l k l vkQ ekfMQkbM LVkp Fk fQft dy ,M dfedy eFkMA d : . ; bLVhV;V vkQ VDukykt h ,M l kbf l l] dk;EcÜkj e 21&23 Qjoj h 2018 d nkju d f"Q] [kk| i l Ldj.k vfHk;kf=dh ,o toik|kfxdh ij vk;kftr vrjjk"Vh; l Eeyu eA

mek , l] cdh;kjuh , l] njb ih] lJLorh ,e, l vkj rxoy vkj- 2017- bEioeV vkQ l kck $\frac{1}{2}$,chch & Cyxk, $\frac{1}{2}$, dfdx Vki cukuk Qkj f;tfj;e foYV jftLVI- Hk-d-v-i-&vkbvkb,pvkj] cxy : e 5&8 fl rEcj 2017 dk cxxokuh ikFkfedrk ,o mHkjr h gb ioFÜk;k fo"K; ij vk;kftr vrjjk"Vh; flEikft ;e eA

9-6-2 jk"Vh;

ckykl ce.;u oh vkj lYoikt u vkj- 2017- ok;j l bMfD l x Qkj l fvfQd'ku vkQ fv'; dYpj jLM cukuk ;ftx bfmthu lyh MoyIM fMVD'ku fdVI gl ,VhC;fVM Qkj n bEioM ikMD'ku vkQ cukuk bu bfm;KA fuVV fo'ofokiy;] exykj e 7&9 fn l Ecj 2017 dk ^LokLF; ,o jkx e fojke d ifr fo"kk.k* ij vk;kftr bfm;u

ok; jkykft dy lklk; Vh d 26o okfkd lEeyu
^ohjkdKu&2017* eA

dUuu ,e] inukHku ch vkj mek , l- 2018-
djDVjkb t'ku vkQ QkVkfj lI'ku bu cukuk
ohfoYl V n CY; ykbV , fefVx Mk; km $\frac{1}{4}$, ybMh $\frac{1}{2}$ -
fr : vurjij e 17&20 Qjojh 2018 dk vk; kft r
lVj Qkj buko'ku bu lkl , M l'ky , D'ku
 $\frac{1}{4}$ l hvkb, l , l , $\frac{1}{2}$ }kjk vk; kft r dy ij vk; kft r
jk"Vh; l feukj e] e-i- 40-

eby oXuku , e vkj jfo vkb- 2017- ikQkbfyx vkQ
Dykj kfy dVckyk bVl , M Mf l Qfjx n
ikf'k; y bufgfc'ku vkQ Dykj kfy fMxM'ku
bu ^LVxhu jkbi* dofM'k cukukA bfnjk xk/kh
df'k fo'ofok; jk; ij] NÜkh l x< e 23&25
uoEcj 2017 dk [kk l j {kk , o tyok;
l eRFkku'khy df'k d fy, ikni dkf; dh dh
mHkj gb Hkfedk ij vk; kft r jk"Vh; lEeyu
eA

ineukHku ch] dUuu ,e] l fky dekj ch vkj mek
, l- 2018- bQDV vkQ , Do l , D lVDV vkQ
ckVuhdYl , M uku bMcy oftVcy vk; Yl
vku cukuk LVe ohoy] vkfM; k i k j l ykxhdkfy l-
fr : vurije 17&20 Qjojh 2018 dk lVj
Qkj buko'ku bu lkl , M l'ky , D'ku }kjk
vk; kft r dy ij vrjjk"Vh; l feukj e- e-i-
39-

jfo vkb- eby oXuku , e- vkj dkej t d- 2017-
, fyo'ku vkQ l kby ekblpj MfQf lV lVl bu
cukuk l hoh- xkM u; u- vkbfcM-

jfo vkb- eby oXuku , e vkj mek , l- 2018- MkV]
l kYV , M V e i p j lVl Vkyj l bu cukuk- vUukey
fo'ofok; jk; jpnEcje e 6&7 ekp 2018 dk
vtfod ifrcy df'k $\frac{1}{4}$ ck/kk, , o dk; uhfr; k
fo"k; ij vk; kft r jk"Vh; l feukj e] e-i- 7-

lYojktu vkj- 2017- vku& lkbv fMVD'ku vkQ lykV
ok; jfl l fon Li'ky jQj l V cukuk ok; jfl l
; ftx yVv fl yk fMokbf l l- fuVv fo'ofok; jk;
exykj e 7&9 fn lEcj 2017 dk ^LokLF; , o
jlx e fo"kk.kvk l fojke* fo"k; ij bfM; u
ok; jkykft dy lklk; Vh }kjk vk; kft r 26o
okfkd lEeyu eA

lYojktu vkj 2017- vyh fMVD'ku vkQ lykV iFkkt l
; ftx uukVDuky kft dy , ikfp l- Vh, u, ;]
dk; EcÜkj e 6 vDrcj 2017 dk l nckgkj gfjr
Økfr d fy, uuk ik l kfxdh ij jk"Vh; l feukj
eA

9-63 l dyu@iy[ku@vkbVh vk/kfjr MVkcl]
l k lVo; j vkfn

l jLorh , e, l] fxfjckc ih] l j'k dekj ih] jfopkeh
ih vkj t; HkkLdju d t- 2018-
vkb l h, vkj&, uvkj l hch&25 b; l vkQ
, D l hyl* fo"k; ij ohfM; k iy [kA fun'kd] Hkk-
d-v-i-&jk"Vh; dyk vul / kku dUn]
fr : fPpjkiYyh] rfey ukM }kjk Hkk-d-v-i-
&, uvkj l hch] fr : fPpjkiYyh] rfey ukM e 17
Qjojh 2018 dk Hkk-d-v-i-&, vkb l hvkj ih $\frac{1}{4}$ Qy $\frac{1}{2}$
ij vk; kft r ikpoh leg ppk d vol j ij
mn?kkVu lekkg d nkjku foekpu fd; k x; kA

mek , l] f'kok d, u] rxoy vkj] dekj oh vkj l j'k
dekj ih- 2018- ^dy dh okf. kft; d fdLe ulnu
d [kkMh d cktjk e fu; kr d fy, Hkk-d-v-i-
&, uvkj l hch dk l xj ikVkdky* ij ohfM; k
iy [kA fun'kd] Hkk-d-v-i-&jk"Vh; dyk vul /
kku dUn] fr : fPpjkiYyh] rfey ukM }kjk Hkk-d-
v-i-&, uvkj l hch] fr : fPpjkiYyh] rfey ukM e
17 Qjojh 2018 dk Hkk-d-v-i-&, vkb l hvkj ih
 $\frac{1}{4}$ Qy $\frac{1}{2}$ ij vk; kft r ikpoh leg ppk d vol j
ij mn?kkVu lekkg d nkjku foekpu fd; k
x; kA



10 i jke'knk=h I ok, ,oik|kfxfd;k dk okf.kT;hdj.k

i jke'knk=h I ok,@fufonkvu I/kku@ik|kfxfd;k dk okf.kT;hdj.k

I. i jke'knk=h I ok,@fufonkvu I/kku

Ø- I-	frfK	ik kfxd h dk uke	xkgd dk irk	jk tLo ½yk[k #i;k e½
1-	20 viy 2017	dkfPp cnjxkg I ncb dkfu;kr d fy, ^uUnu* dydkijh{k.k vk/kkjijty;ku I Hktu d fy, rduhdhfn'kkfun'k	,xhdYpjy ,Mik I LMQMikMDV I ,D I ikVMoyieV ,FkkfjVh ½, ihMk½] rrrh; ry] ,u I h; vkb Hkou] ,f'k; kM xke d I keu] vxLr Økfr ekx] ub fnYyh&110016	6-70
2-	4 tykb 2017	dy eb ;E; I h iÜkh /kCck jxmxRi Uudjuoky jkxtu d ekbdk LQjykb;E; I h d Loik= fujk/k d fy, eVkfMdky dk eY;kdu	e I I edvkt I] 1757] bLV ,M ^,* eu] 36ok Øk I] ukokCykd] t ;uxj] cxy : &560 069] dukVd	2-05
3-	31 tykb 2017	dy dh d"kd f dLe& deyfodk I ,1 dk eY;kdu	u'kuy buko'ku QkmM'ku& bfM;k ½foKku ,oik kfxd hfoHkkx dk ,d Lok;Ük'kk I h fudk; ½] Hkkjr I jdkj] I VykbVdKElyD I] t k/kijVdj] iepnuxj] ekx] I VykbV vgenkckn&500 082] x t jkr	4-14
II. ik kfxfd;k dk okf.kT;hdj.k				
1-	8 fl rEcj 2017	cukufQx	Jh t k I t k I Q eF;] ofjdkeDdy gkm I] fi fMekuk Mkd?kj] dkFkkexye& 686 692] djy	0-10
2-	8 fl rEcj 2017	cukufQx	Jhdkf'kd I yoe I [;k 53] if'pe 50 QVekx] jkek d".kije] d : j& 639 001] rfeyukM	0-10
3-	8 fl rEcj 2017	dy d vkV ij vk/kkfjr f'k'k vkgkj	Jh ekxjxbycV yk t Vh] 39] 29oh xyh] 'kkfruxj] iky;edkVVb& 627 002] rfeyukM	0-10

Ø- l-	frfFk	i k kfxdh dk uke	xkgd dk irk	jk tLo ½yk[k #i;k e½
4-	2 ekp 2018	dy d vkVvkjvkvij vk/kkfjrf'k'kvkgkj	Jherh l rfo'oukFku] fun'kd] fe=fudru] oykukM] fr : vur ije& 695 543] djy	0-20
5-	2 ekp 2018	dy d i"i dh l L; kÜkj l k t& l Hkky] idftx , oHkMkj .k	Jh oh- vk : exe] 1@65,] ukFkLVhV] vfFkdPpukyjj] Jh odne rKYyd] Vhdkfju& 628621] rfeyukM	0-10
III. vU; lok,				
1-	Ård lo/kuik/kk d fo"kk.k l phdj .k rFkk vkuof'k dQhMfyVh d fy, i ;kx'kkyk iR; kf; r l fo/kk ½fo"kk.k l phdj .k½		ekr ik/kk vkj ekr dYpj dk fo"kk.k l phdj .k rFkk Ård lo/ku }kjkmxk, x, dy d ik/kk	282-00
2-	Ård lo/kuik/kk d fo"kk.k l phdj .k rFkk vkuof'kd QhMfyVh d fy, i ;kx'kkyk iR; kf; r l fo/kk ½fo"kk.k l phdj .k½		dy dh okf.kfT; d fdLek xkMu; u] fofy ;E l] jkcLVk] u; iou] jMcukuk] fDoVyuUnu] l cjh vkfn d Ård lo f/krik/kk d 979 cpk dk mudhvkuof'kdQhMfyVh d fy, ijh{k.k fd; k x; kg ft ldfy, , l, l vkj vkj vkb , l, l vkj ekdj dk mi ;kx fd; kx; k grFkk ifronu tkjh fd, x, gA	17-32
3-	,fvljk dh vkifr		dy d fo"kk.kvkuker½ [khjk fpÜkh fo"kk.k ¼ l h, eoh½] dy d lgi= fo"kk.k ¼BBBrMV½ vkj dy d xfpN rpM fo"kk.k ½ch oh Vh oh½ d fy, cgDYkkuh; , Vh l hje dk mRiknu vkjfo fhkUu jkT; df"k fo'ofok ky; kdk mudhfcØh	2-15
4-	vrjk"Vh; if'k{k.kdk; Øe		Hkkjr&vYhdhQkje l fev& m d vrxxrvYhd d ukukxfjd kd'fo"kk.k l i HkkfordyvkjlyVu d fy, vfrMRd"V vkf.odunkfudrduhd*	6-69



Ø- l-	frfFk	i k kfxdh dk uke	xkgd dk irk	jk tLo %yk[k #i;k e½
5-	ik"ddYpjk dh vkifr		el l vj.; ck;kVdx t jkrdkdy dh okf.kfT;dfd Lekm erFkxkMu;u d ik"ddYpjk dh vkifrA rfeyukM d fofHkUuft yk d dykmR i kndfd l kukdkdy dh okf.kfT;dfdLem e d 5949 ik/kk %5375½ Ård lof/kr i k/kk vkj 574 idnk dh vkifr	0-20
	dy		321-85	

,evk;@,evk l h@,evk, ijg Lrk{kj

frfFk	,evk;@,evk l h@,evk,	fooj.k
20 viy 2017	uUnu d fu;krdk le>u d fy, Kkiuijg Lrk{kj	Hkk-d-v-i-&,uvkj l hch u lenhex l ncbdkdy dh okf.kfT;dfdLeuUnu d fu;krd fy, ,ihMkvkjellIQ;j ,Dli kV lbfM;kfyfeVM] dkPph d l kFk le>krkKkiuijg Lrk{kjfd,A
26 tykb 2017	,uvkbVh] fr : fPpjkiYyh] rfeyukM d l kFk le>krkKkiuijg Lrk{kj	Hkk-d-v-i-&,uvkj l hch u i k kfxfd;k rFkLuk rdk Ûkjvu l/kkudk;Øefodflrdju d fy, ,uvkbVh] fr : fPpjkiYyh d l kFk ,evk, ijg Lrk{kjfd,A
11 vDrcj 2017	d,u l hbVh] FkkfVV;ke] rfeyukM d l kFk le>krkKkiuijg Lrk{kj	Hkk-d-v-i-&,uvkj l hch u dy d mRiknu ,oeY;o/ku d fy, fofHkUu ;=@ vk t kjfodflrdju d fy, dk xukMdk y t vk Qb t hfu;fj x ,MVDuk y k t hFkkfVV;e d l kFk le>krkKkiuijg Lrk{kjfd,A
16 vDrcj 2017	vk/kin'k l jdkj d l kFk lg;kx d Kkiuijg Lrk{kj	Hkk-d-v-i-&,uvkj l hch u eY; J[kykic/k] dy d fu;kre l gk;rk] tfodmR i knurFkkvif'k"V d mi;kx dh fn'kkeik kfxfd;kfodflrdju d fy, vk/kin'k l jdkj d l kFk ,evk l hijg Lrk{kjfd,A



fp= % fun'kd] Hkk-d-v-i-&,uvkj lhihch }kjk vk/kin'k d ekuuh; e[;e=h d lkFk ,evk lhiigLrk{kj



fp= % Hkk-d-v-i-&,uvkj l hch ,uvkbVh] fr : fPpjkiYyh d }kjk ,evk, iigLrk{kj

11 vkj, lh@vkbvkj lh@vkb, elh dh cBd

vkbvkj lh dh cBd

el; kof/k ILFkkuvul/kku lfevr ¼vkbvkj lh dh cBd 18] 22] vkj 29 flrEcj 2017 dkvk; kft rgbAl HkkoKkfudk u ILFkkuepyjghr Fkckg; fuf/k lgk; rkiklrfj; ktukvk dh miyfC/ k; k o o"k 2018&19 d fy, rduhdhd; Ø eiLrrfd, AdNubifj; ktuk, HkhiLrr dh xbvkj mu ijfoLrkj l ppgbA

vkb, elh dh cBd

Hkk-d-v-i-&, uvkj lh dh 23oh ILFkkuic/k lfevr ¼vkb, elh dh cBd Hkk-d-v-i-&, uvkj lh dh fun'kdMk-, l- mek dh v/; {krke 23 eb 2017 dkgb A vU; mifLFkr lnl; Fk&Mk- fodekfnR; ikM] i/kkuoKkfud] Hkk-d-v-i-] dc&2] ubfnYyh(Mk-, e- HkDroR lye] i/kkuoKkfudvkj v/; {k ¼dhV grfoKku iHkx½] Hkk-d-v-i- &, uch, vkbvkj] cxy: (Mk- ¼Jherh½ vujk/kk vxoky] i/kkuoKkfud] Hkk-d-v-i- &, uchihthvkj] ubfnYyh(Mk-, l- Jhje] i/kkuoKkfud] Hkk-d-v-i-&vkbvk, pvkj] cxy: (vf/k"Bkrk] cxxokuh]



vkb, elh d lnl; Hkk-d-v-i-&, uvkj lhche

rfeyukMdf"fo'ofok] ky;] dk; EcVj(rfeyukM] ljdkj] plub d cxxokuh ,ojki.kQlyvk; Dr(vijckxokuhfun'kd ¼Qy½] cxxokuhfoHkx] dukVd ljdkj] cxy: (foUk ,oy[kk vf/kdkjh] Hkk-d-v-i-&lhvkbch,] plub(Jh ,e, uoFkh; kFkuvkj Jh , l- ih- jk tUnu ILFkku d foRr lc/khofHkUuennki jfoLrkj l ppgbA

vkj, lh dh cBd

Hkk-d-v-i-&, uvkj lh dh vul/kkuijke'knk=h lfevr ¼vkj, lh dh 19oh cBd 18&19 tuoJh 2018 dkgbAvkj, lh d lnl; k u vul/ kkuQkerFkki; kxkRedlykVv dk nkjfd; kvkjoKkfudk d lFkQynk; hppkdhAMk-, l- mek] fun'kd] Hkk-d-v-i-&, uvkj lh dh u Hkk-d-v-i-&, uvkj lh dh fiNyok dh vul/kkumiyfC/k; k ij , d foLrrilrrhdj.kfn; kAbldi'pr vkj, lh d lnl; &lfpo] Mk- ch- ineukHku u vkj, lh dh 18oh cBde dh xbfIQkfj'kkij dh xbdkjokb dh fjikViLrrdhAHkk-d-v-i-&, uvkj lh d oKkfudk u vul/kkuifj; ktukvk dh e[; miyfC/k; kiLrr dh vkj mu ijfoLrkj l ppgbAvkj, l hny u i; kxkRedi{k=k d j[kj[kkorFkk ILFkku dh vul/ kkumiyfC/k; kiji lUurko; DrdhA



Hkk-d-v-i-&, uvkj lh dh vkj, lh d lnl; rFkHk-d-v-i-&, uvkj lh d oKkfud

12 oKkfudk rFkk vU; LVkQ }kjk ifrHkkfxr if'k{k.k@iu'p;k ikB; Øe@xhe@'kjndkyhu if'k{k.k@lfeukj@lEeyu@lxf'B;k@dk;'kyk,

ekuo l l/ku fodk l

12-1 Hkk-d-v-i-&,uvkj l hch d LVkQ }kjk ifrHkkfxr if'k{k.k@iu'p;k ikB;Øe

LVkQ dk uke	dk;Øe dk uke	LFkku	frfFk
vkj- lYojktu i/kuu oKkfud	Vk l fØIVke ,ukfyfVD l %jh&l hDof l x vkj Mh ukokkz	t huke , tx'ku lVj] ck; kfufom VDukyk t h] cxy :] dukVd	26&27 viy 2017
Mk- jkek tu] i/kuu oKkfud	df"k vul/kku e to l puk foKku e gky dh ixfr;k % ,d i;kxkRed ifjn';	Hkk-d-v-i-&vkb, vkjvkb] ub fnYyh	1&21 fn l Ecj 2017
Mk- ih- l j'k dekj] ofj"B oKkfud	uukik l kfxdh d vui;kx e ixfr;k	Hkk-d-v-i-&l jdkV] eEcj] egkj"V	11&15 fl rEcj 2017
ih- fxjhckc] oKkfud	enk dhVuk'kd thok d fvdka ic/k d fy, dhVjxtud l=dfe;k d mi;kx dh ik l kfxfd;k ij {kerk fuek.k dk;Øe	Hkk-d-v-i-&,uch, vkbvkj] cxy :] dukVd	28 vxLr & 1 fl rEcj 2017
ih- nj;] l gk;d e[; rduhdh vf/kdkjh	^E; l k dk y{k.k&o.ku vkj iy[ku* fo"m; ij E; l kuV ,f"m;k {k=h; dk;'kkyk	,e,vkjMhvkj] t jkxku] rjxUu eyf"m;k	13&17 uoEcj 2017
Mh- jkepUn efr] , l lYojkt rduhdh vf/kdkjh %ankukz	Hkk-d-v-i- d rduhdh LVkQ d fy, en dk'ky vkj 0;fDrRo d fodkl ij {kerk e of) l c/kh dk;Øe	Hkk-d-v-i-&uke] gnjkckn] ryxkuk	15&24 tu 2017
d- dkejk t rduhdh vf/kdkjh	i;kxkRed vkdMk fo'y"m.k	Hkk-d-v-i-&vkb,, l vkjvkb] ub fnYyh	26 tykb & 8 vxLr 2017
d- dkejk t rduhdh vf/kdkjh vkj- fipbeFk ofj"B rduhdh vf/kdkjh	df"m ek l e foKkuh vkdMk dk l dyu] fo'y"m.k vkj ic/k	Hkk-d-v-i-&ØhMk] gnjkckn] ryxkuk	11&23 fn l Ecj 2017
,e cnhukFk ofj"B rduhdh lgk;d	x.koUkki.k jki.k l kexh d mRiknu d fy, io/ku ,o uljh ic/k	Hkk-d-v-i-&vkbvkj,pvkj] cxy :] dukVd	13&22 uoEcj 2017



LVkQ dk uke	dk;Øe dk uke	LFku	frfFk
oh- eukgju rduhdh lgk;d	vkVkeckby vuj{k.k} lMd lj{k ,o 0;ogkjRed dk'ky	Hkk-d-v-i-&l hvkb,b] Hkkiky	18&22 tykb 2017
ih- e:xu lgk;d	lokvk e vkj{k.k ij if'k{k.k dk;de	vk b, lVh,e] ub fnYyh	13&15 uoEcj 2017
vkj- uhyk exk ';keyk dUuu vk'kfyfid xM&3	n{k rk ,o 0;ogkjRed dk'ky c<ku ij if'k{k.k dk;Øe	Hkk-d-v-i-& uke] gnjkckn	25&31 vDrcj 2017
ih- dkejkt oh x.k'ku oh- ikfM;u d'ky lgk;h LVkQ	o"kk ty l xg.k rFkk ty ic/k dh rduhd	Hkk-d-v-i-&df"k foKku dUn] dyhFky;] d : j] rfey ukM	7 vDrcj 2017

12:2 okkfudk rFkk vU; LVkQ u ftu dk; 'kkykvk@ lfeukj@ lEeyuk@ l xkf"B; k@okkfud cBdk vkfn e Hkkx fy;k] mudh lph

LVkQ dk uke	dk;Øe	vk;k t d@LFky	frfFk
Hkk-d-v-i-&,uvkj l hch dk lElr LVkQ	jk"Vh; dyk mR lo	, l h vkj vkjvkb] Vh,u, ;] enj] rfey ukM	21&23 tykb 2017
	Hkk-d-v-i-&vkjvk l hch LFkkiuk fno l	Hkk-d-v-i-& Hkk-d-v-i-& ,uvkj l hch] fr : fPpjkiYyh] rfey ukM	21 vxLr] 2017
	Jherh fxfj tk Jhke] cxy : }kjk iVVk d ckj e vkbi hvkj rFkk vkidk D;k tkuu dh vko';drk g] bldk ,d flgkoykdu		30 vDrcj 2017
	dy dk mRiknu vkj mRikndrk c<ku d fy, uuk ik kfxdh d vui;kx ij ifjppkRed cBd		25 uoEcj 2017
	Hkk-d-v-i-&,vkb l hvkj ih ¼Qy½ dh ipo"kh; l eh{k ny dk eY;kdu		19&20 fn l Ecj 2017
	^Hkkjr e dy dh [krh ij mHkjr gv k l dV & ¶; tfj;e e>ku m".kdfVc/kh; tkfr&4 l lcf/kr l xjk/k vkj to l j{k d enn* fo"k; ij ijke'knk=h cBd		21 fn l Ecj 2017
	Hkk-d-v-i-&,vkb l hvkj ih ¼Qy½ ij ikpoh leg ppk		15&18 Qjoj h 2018

LVkQ dk uke	dk;Øe	vk;kt d@LFky	frfRk
	df"m mUufr eyk &¶; tfj;e e>ku ij tkx:drk vkj l[k l fuiVuk		17 ekp 2018
, l mek ch- ineukHku vkj- rxoy oh- dekj d t t;HkkLdju d ,u f'kok ih- l j'k dekj	fu;kr d fy, dy dh gkb Vd [krh ij dk;'kkyk	,xh lp %bfM;k½ ikboV 7&8 tuojuh 2018 fyfeVM] ukf l d] egkj"V vkj Hkk-d-v-i-& ,uvkj l hch] fr : fPpjkiYyh }kjk tyxko] egkj"V e vk; kft r	
, l- mek vkj- rxoy , l- mek oh- dekj	oYM cukuk Qkje dk rrrh; of'od l Eeyu jk"Vh; dyk mR lo lpkyu l fefr dh cBd	,Q,vk] tuok] fLoV t jyM l hvkbvkb nf{k.kh {k= e[;ky;] pUub rfey ukM	10 uoEcj 2017 9 eb 2017 vkj 19 tu 2017
, l-mek oh- dekj	jk"Vh; dyk mR lo lpkyu l fefr dh cBd	, l h vkj vkjvkb %Vh,u, ;%] enjb] rfey ukM	31 eb 2017
, l-mek oh- dekj , l mek vkj- rxoy , l- cdh;kjuh ,e- l- l jLorh	jk"Vh; dyk mR lo lpkyu l fefr dh cBd vkbvkbVh, ifj;k tuk] okf"kd dk; ;k tuk cBd	ckxokuh fun'kky;] pUub] rfey ukM Hkk-d-v-i-&,uvkj l hch] fr : fPpjkiYyh] rfey ukM	7 tykb 2017 23 tu 2017
, l mek vkj rxoy	¶; tfj;e e>ku & m".kdfVc/kh tkfr 4 ij Mh, l h dh vrjk&i"B cBd	ub fnYyh	16 fn l Ecj 2017
, l mek vkj rxoy ,e- ykxukFku , l- mek vkj- rxoy vkj- l Yojk tu ,e- eby oXuku vkb jfo , l- cfd;kjuh ,e- l- l jLorh l h- vujk/kk	Hkk-d-v-i-& ck;kof l Vh bVju'kuy dh lg;kxkRed ifj;k tuk dh cBd l LFkku to l j{kk l fefr dh n loh cBd %vkbch, l l h½	ck;kof l Vh bVju'kuy] cxy:] dukVd Hkk-d-v-i-&,uvkj l hch] fr : fPpjkiYyh] rfey ukM	28 fn l Ecj 2017 31 vDrcj 2017



LVkQ dk uke	dk;Øe	vk;k t d@LFky	frfRk
, l mek , e eby oXuku , l cdh;kjuh , e, l- l jLorh Mh- jket;e , l- iyuhpkhe , l- mek , e eby oXuku vkb- jfo , l- cdh;kjuh , e, l- l jLorh , l mek vkb jfo , l cfd;kjuh , e , l l jLorh , - f=x.kukoy l h- vujk/kk vkj rxoy oh dekj	ckxokuh & ikFkfedrk, vkj mHkjrh gb iofÜk;k ij vrjjk"Vh; flEikft;e okfkd chvkbvkj, l h leh{k k cBd ^dy e l/kk d fy, vYhd d xV yd {k=k e NkVh tkr d fd l kuk d fy, dy dk l/kk* ¶l; tfj;e e>ku & m".kdfVc/kh; tkfr 4 ij lonhdj.k d fy, df"k foKku dUnk %vpy IX½ dh 24oh vcpfyd dk; "kkyk	Hkk-d-v-i-& vkbvkb,pvkj] cxy:] dukVd Hkk-d-v-i-&,uvkj l hch] fr : fPpjkiYyh] rfey ukM Hkk-d-v-i-&,uvkj l hch] fr : fPpjkiYyh] rfey ukM df"k foKku dUn] cjgkuij] e/; in'k	4&8 fl rEcj 2017 16 fl rEcj 2017 19&23 vxLr 2017 24&26 uoEcj 2017
, e eby oXuku vkb jfo oh dekj d- e f'kok ih- l j'k dekj ih- nj	ikni dlf;dh & [kk] l j{k k rFkk tyok; leRFkku" khy df"k d fy, ikni dlf;dh dh mHkjrh gb Hkfedk dy ij jk"Vh; l feukj	vkb t h dohoh] jk; ij] NÜkh l x< l Vj Qkj buko'ku bu l kb l ,M l k'ky ,D'ku % l h vkb, l , l , %] dfYy; j] fr : vur ije] d j y e vk; k f t r	23&25 uoEcj 2017 17&19 Qjojh 2018
oh- dekj , e- ykxukFku d-, u- f'kok Mh- jket;u d , e f'kok ih l j'k dekj	m".kdfVc/kh Qyk & dyk vkj vukj ij Kku e Hkxnxjh dh dk; "kkyk [kk] i l Ldj.k & ed bu bfM;k dk u;k ekx* fo"k; ij vkbvkb, QihVh [kyk fno l df"k i l Ldj.k , o eY; o/ku ij dk; "kkyk %oh, vkbth, & 2017½	vur ije] vk/k in'k vkbvkb, QihVh] r tkoj] rfey ukM df"k fodk l , o fd l ku dY;k.k foHkx] d j y l jdkj }kj k d, ;] f="kj] d j y e vk; k f t r	5 uoEcj 2017 16 fl rEcj 2017 27&31 fn l Ecj 2017

LVkQ dk uke	dk;Øe	vk;kt d@LFky	frfRk
, l cfd;kjuh ,e-, l- l jLorh	f}rh; {k= e Hkkjr teu f}i{kh; lg;kx ij dk; 'kkyk	ihihoh vkj ,Qvkj, }kjk ,u,, l l h] ub fnYyh e vk;kt r	21 uoEcj 2017
vkj rxoy	o" 2022 rd fd l kuk dh vkenuh nxuh dju ij f}rh; jkT; leUo;u l febr dh cBd	Vh,u,; dk;EcUkj] rfey ukM	7 viy 2017
vkj- lYo jktu	ohjkd ku&2017 LokLF; rFkk jkx e fo"kk.k l fojke to l j{kk l febr l LFkk dh cBd ¼vkbch, l l h½ Vhd dh unfudh ij l hvkj ih dh l eh{kk cBd ^Ård lo/ku l mxk, x, ik/kk d fy, jk"Vh; iek.khdj.k i.kkyh ¼,u, l l h½ Vh l h i h½ ij fgr/kkj dk dh cBd	fuVV fo'of o ky;] exykj] dukVd Hkk-d-v-i-&vkbvkb,pvkj] 9 vxLr 2017 cxy :] dukVd Hkk-d-v-i-&vkbvkbvkj] 6 vxLr 2017 cxy :] dukVd Ldki do'ku lVj l Hkkxkj] 14 uoEcj 2017 yk/kh jkM] ub fnYyh	7&9 fn l Ecj 2017
,e- eby oXuku	fo'o enk fno l	l hvkjbbMh] df" foKku dUn] vfj;kyj ftyk] rfey ukM	5 fn l Ecj 2017
vkb jfo	E; /k vkuof'kd l l k/kuk d eY;kdu ij dk; 'kkyk df" e vtfod ifrcy & ck/kk, ,o dk;uhfr;k ij jk"Vh; l feukj ¼; th l h& , l , i h½ }kjk ik;kt r	ck;ko lVh bVju'kuy ekVify; j] Yk l vUkey; fo'of o ky;] fpnEcje	12&15 fn l Ecj 2017 6&7 ekp 2018
oh- dekj	dyk fgr/kkj dk dh cBd	l hvkbvkb vkj cxxokuh foHkkx }kjk l ye e vk;kt r	19 viy 2017
oh dekj	^rkM x, xPNk d ifjogu d fy, okgd i.kkyh* ij Vh,u,; rFkk d,ulhbVh] FkfVV;u d okkfudk d l kFk ijke'k cBd 8oh okkfud ijke'knk=h l febr dh cBd 11oh okkfud ijke'knk=h l febr dh cBd 9oh okkfud ijke'knk=h l febr dh cBd vkj ^uk'kd thok d l jf{kr mi;kx* ij tkx:drk dk;Øe	dk;EcVj Hkk-d-v-i-&df" foKku dUn] /keijh Hkk-d-v-i-& df" foKku dUn] ukeDdy Hkk-d-v-i-&df" foKku dUn] ijecyj	5 fl rEcj 2017 3 uoEcj 2017 7 uoEcj 2017 7 fn l Ecj 2017



LVkQ dk uke	dk;Øe	vk;k t d@LFky	frffk
d- t- HkkLdju	peu ifj;k tuk d vrxr ckxokuh Qlyk ij mi t ekMfyx d fy, fopkj eFku dk; 'kkyk	,e,u l h, Q l h] ub fnYyh	18 vxLr 2017
d-,u- f'kok	[kk] l j{kk rFkk 0; kogkfjd ik" k.k ij oKkfud lg;kx ij jk"Vh; l Eeyu	,Q, l, l, vkb] ,QMh, Hkou] dkVyk ekx] ub fnYyh	5 Qjoj 2018
, l- cdh; kjuh	vYhdh d xV yd {k= d NkVh tkr d fd lkuk d fy, dy dk l/kkj* 'kh"kd dh io vYhdh dyk i tuu ifj;k tuk ij okfkd cBd	dEiky] ;xkMk	24&27 viy 2017
Mh- jket ;e	jkT; Lrj ij to l j{kk {kerk fuek.k ij dk; 'kkyk	Vh,u, ;] dk; EcÜkj	23 ekp 2017
	Hkk-d-v-i-&df"k foKku dUn dh 8oh oKkfud ijke'k l febr cBd	Hkk-d-v-i-&df"k foKku dUn] fofj t h i je] oYy j	9 uoEcj 2017
	Hkk-d-v-i-&df"k foKku dUn dh 9oh oKkfud ijke'k l febr cBd ¼ l hb, uMhb l hVh½	Hkk-d-v-i-&df"k foKku dUn ¼ l hb, uMhb l hVh½ dekph i je] Fkuh	31 ekp 2017
ih- l j'k dekj l h- vujk/kk ih- fxjhckc	Hkkjr vrjjk"Vh; foKku egkR lo 2017 to fu;=.k ,o fVdkÅ dhV uk'kd t ho ic/k ij vrjjk"Vh; l Eeyu ¼vkb l hch, l &2018½	vUuk fo'of o l ky ;] pUub , l h vkj vkjvkb ¼Vh,u, ; ½ fdYyh dye] rfe y ukM	13&16 vDrcj 2017 29&31 tuo jh 2018

13 dUn e vk;kft r dk; 'kkyk,] lfeukj] d"kd fno l vkfn

24^oHkk-d-v-i-&,uvkj l hch LFkkiuk fno l ,o fd l ku eyk

Hkk-d-v-i-&,uvkj l hch e 21 vxLr 2017 dk 'fd l ku ey* d : i e 24ok LFkkiuk fno l euk; k x; k ft l dk e[; fo" k; ^ik"kf.kd l j{kk d fy, dyk vkj lyVu* FkkA Mk- , l- mek] fun'kd] Hkk-d-v-i-&,uvkj l hch u lekjg dh v/; {krk dh rFkk Mk- l h- vkun jke d".ku] fun'kd] Hkkjr; [kk l i lLdj.k m] kx l LFkk u %vkbvkb, QihVh] Hkkjr l jdkj] rtkoj bl lekjg d e[; vfrfFk FkA vrjjk"Vh; oKkfud t l Mk- jkuh lUuu] vkbvkbVh, vkj d; ,y] cft; e(Mk- ,yu ckm u] vkbvkbVh,] rtkfu; k(vkj Mk- : cuh] ,u, vkjvk] ;xkMk lEekuh; vfrfFk FkA Mk- , l- mek u dUn dh fiNy o" k dh xfrfuf/k; k d ckj e l{ki e crk; kA Mk- l h- vkun jked".ku] fun'kd] vkbvkb, QihVh u fd l kuk l vkbvkb, QihVh e miyC/ k lfo/kk vk d mi; kx dk vujk/k fd; k rFkk Hkk-d-v-i-&,uvkj l hch d lFk l g; kxh vul/ku ij cy fn; kA Mk- jkuh Louu] vkbvkbVh, vkj d; ,y] cft; e u ^vYhd k e ykxk dh [kk l ,o ik"kf.kd l j{kk dk ijk dju e dy vkj lyVu dh Hkfedk* ij fo" k" k 0; k[; ku fn; kA Mk- vkj- rxoy vkj Mk- d-, u- f'kok u rduhdh 0; k[; ku fn, A dy dh [krh d fy, fofHkUu fuo"kk vkj ik l kfxd; k dk inf'kr djr g, 20 LVky dh ,d in'kuh Hkh yxkb xBA



fp= % Hkk-d-v-i-&,uvkj l hch LFkkiuk fno l ,o fd l ku ey d nkjku idk'kuk dk foekpu

Hkk-d-v-i-&,vkb l hvkj ih %Qy% d ipo"kh; l eh{kk ny %D; vkjVh% dh cBd

Hkk-d-v-i- & vf[ky Hkkjr; l eflor vul/ku ifj; ktuk %Qy% dh ipo"kh; l eh{kk ny dh cBd %D; vkjVh% 19&20 fn l Ecj 2017 dk vk; kft r dh xbA cBd dh v/; {krk ineJh Mk- d-, y- pM<k] v/; {k u dh rFkk Mk- ,p-d- l ukifr] Mk- l R; or erh] Mk- oh-, l- Bkdj vkj ch-, e- l h- jMMh] D; vkjVh ny d l nL; Hkh cBd e mifLFkr FkA fofHkUu jkT; df" k fo'ofok; k; d oKkfud ifrfuf/k; k u Hkh bl cBd e Hkx fy; kA Mk- idk'k ikfVy] ifj; ktuk l eUo; d] ,vkb l hvkj ih %Qy% Mk- , l- mek] fun'kd] Hkk-d-v-i-&,uvkj l hch rFkk jkT; df" k fo'ofok; k; k d vU; oKkfudk u viu&viu iLrrhdj.k fn, A D; vkjVh d ,d vx d : i e dyk fgr/kkj dk dh cBd Hkh vk; kft r dh xb vkj bl cBd e fd l kuk] uokUef" k; k m] fe; k rFkk jkT; df" k fo'ofok; k; k o Hkk-d-v-i- d df" k foKku dUnk vkfn d ifrfuf/k; k u ble Hkx fy; kA



fp= % Hkk-d-v-i-&,uvkj l hch D; vkjVh ny d l nL;

¶; tfj; e e>ku] m".kdfVc/kh tkfr&4 ij i jke'knk=h cBd

¶; tfj; e e>ku m".kdfVc/kh tkfr&4 % Hkkjr e dy dh [krh d fy, ,d mHkjr k gvk l dV* fo" k; ij ,d i jke'knk=h cBd 21 fn l Ecj 2017 dk Hkk-d-v-i-&,uvkj l hch e vk; kft r dh xb ft l e fofHkUu dUn d oKkfudk] uker% Mk- ,u-d- d".ku dek] {k=h; l eUo; d & ck; kof l Vh bVju'kuy] ub fnYyh(Mk- jk tu 'kek] v/; {k % l xjk/k bdkb] bØh l V] gnjkcn(



Mk- ,u- lR;ukjk;.k] l;Dr fun'kd ¼ihih] MhihihD; , l½] Qjhnckn(Mk- ,e- vkun jk t] io fun'kd] Hkk-d-v-i-&vkbvkb, l vkj] dkyhdV(Mk- , l- l h- nc] v/;{k] ikni l xjk/k iHkkx] Hkk-d-v-i- &,uchihthvkj] ub fnYyh(Mk- oh-d- ik.M] i/kku okkfud] Hkk-d-v-i-] , l,eMh ¼ckxokuh foKku½] Hkk-d-v-i-] ub fnYyh(Mk- ,-, l- d".kefr] v/;{k] ikni jkxfoKku] Vh,u,;] dk;EcÜkj vkj Mk- d- l;kukFk lnje] ik/;kid] ckxokuh] Vh,u,;] dk;EcÜkj u bl cBd e Hkkx fy;k rFkk ¶; tfj;ei e>kudh m".kdfVc/ kh tkfr&4 d vul/kku] tol j{kk ,o l xjk/k d ennk ij ppk dh A

Hkk-d-v-i-&,vkb l hvkj i h ¼Qy½ ij i kpoh leg ppk

Hkk-d-v-i-&,vkb l hvkj i h ¼Qy½ ij i kpoh okf"kd leg ppk dh etckuh 15&18 Qjoh 2018 dk Hkk-d-v-i-&,uvkj l hch] fr : fpjkiYyh }kj k dh xba Hkk-d-v-i- d 17 lLFkkuk vkj 37 jkT; fo'ofok; k d ifrfuf/k;k u bl ppk e Hkkx fy;k rFkk viuviu dUnk dh vul/kku miyfc/k;k iLrr dhA iR;d dUn dh vul/kku miyfc/k;k o rduhdh dk;Øek ij foLrkj l ppk dh vkj bl dh v/;{krk Mk- idk'k ikfVy] ifj;ktuk lelo;d] Hkk-d-v-i-&,vkb l hvkj i h ¼Qy½ u dhA

Hkk-d-v-i-&,uvkj l hch d jtr t;rh lekkg dk vkipkfjd mn?kkVu Mk- vkun dekj flg] mi egkfun'kd ¼ckxokuh foKku½ ,o Qly foKku½ Hkk-d-v-i- u 17 Qjoh 2018 dk fd;ka Mk- , l- uxu vyh ftUuk] l h th,e] ukckM] pUub vkj Mk- ch,e- l h- jMMh] Hkk-d-v-i-&fo'k" vkef=r lnL; rFkk io dyifr] okb, l vkj,p; u e[; vfrfFk;k d : i e bl lekkg e Hkkx fy;ka Hkk-d-v-i- d foHkUu lLFkkuk d fun'kd k uker½ ,e-vkj- fnu'k] Hkk-d-v-i-& vkbvkb,pvkj] cxy:(Mk- , l-jk tu] Hkk-d-v-i-& l hvkb, l,p] y[kuÅ] Mk-,e-, l- yMkfuk; k] Hkk-d-v-i-& l h l hvkj vkj] ukxij(Mk- , l-Mh- lkor] Hkk-d-v-i-&,uvkj l h th] i.k vkj Mk- fo'kky ukFk] Hkk-d-v-i-&,uvkj l h,y] et¶Qjij u bl cBd e Hkkx fy;ka Mk- ,p-i-

eg'ojlik] ifj;ktuk lelo;d ¼rkM½(Mk- euh"k nk l] Hkk-d-v-i- e[;ky; rFkk Mk- , l-d- efyd] egkfun'kd d ifrfuf/k Hkh cBd e mifLFkr FkA



fp=- Mk- vkun dekj flg] mi egkfun'kd ¼ckxokuh foKku vkj Qly foKku½ Hkkjrh; df"k vul/kku ifj"kn] jk"Vh; dyk vul/kku dUn d jtr t;rh lekkg e mifLFkr tuk dk lEckf/kr djr g,

ck;kof lVh bVju'kuy&vkbvkbVh, l & Hkk-d-v-i-&,uvkj l hch lg;kxh ogr ifj;ktuk dk mn?kkVu

¶; tfj;e e>ku ifrjk/k l ;Dr mUur dy dk i tuu* "kh"kd dh Hkk-d-v-i-&,uvkj l hch d fy, vul/ kku ?kVd l ;Dr ^vYhd d xM yd {k= e NkVh tkr d fd l kku d fy, dy dk l/kkj* "kh"kd dh vrjjk"Vh; lg;kxRed ogr ifj;ktuk dh ppk cBd dk io vkjHk 1 viy 2017 dk gvka Mk- ,u-d- d".ku dekj] ck;kof lVh bVju'kuy & {k=h; ifrfuf/k] nf{k.k vkj e/; ,f'k;k(Mk- MCY; , l- f<Yy] lg;k;d egkfun'kd ¼ckxokuh foKku½] Hkk-d-v-i-] ub fnYyh(Mk- , l- mek] fun'kd] Hkk-d-v-i-&,uvkj l hch] fr : fpjkiYyh rFkk Hkk-d-v-i-&,uvkj l hch l vk,



fp=- ck;kof lVh bVju'kuy d {k=h; lelo;d Mk- ,u-d- d".k dekj] ck;kof lVh bVju'kuy & vkbvkbVh,] Hkk-d-v-i-&,uvkj l hch lg;kxRed ogr ifj;ktuk e mifLFkr lenk; dk lEckf/kr djr g,

oKkfudk o jkT; rFkk Hkk-d-v-i- d vU; lLFkkuk d ifrfuf/k; k u Hkh bl cBd e Hkkx fy; kA ifj; ktuk dk mnn'; dy dh ¶; tfj; e e>ku jkx ifrjk/kh fdLe fodflr djuk g rkfd Hkkjrh; fd lkuk dh vko'; drkvk dh ifr dh tk l dA bl volj ij dy dh 75 fofHkUu fdLek d xPNk dk n'kkr g, , d in'kuh Hkh yxkb xBA

^dy dh mRikndrk c<ku d fy, uukik |kfxdh d vui; kx* ij ifjppk cBd

^dy dk mRiknu o mRikndrk c<ku d fy, uuk ik |kfxdh dk vui; kx^ fo" k; ij , d fno l h; ifjppk cBd dUn e vk; kft r dh xBA bl dk mnn'; uuk ik |kfxdh d ykHk iklr djuk rFkk dy dh mRiknu] l j{kk , o i l d j . k i . kkyh e bl ik |kfxdh d mi; kx dh l Hkkoukvk dk ryk'kuk FkA Mk- d- , l- lce.; u] ik/; kid] uuk foKku , o ik |kfxdh] rfey ukM df" k fo' ofo | ky;] dk; EcUkj (Mk- 'kjr pUn ckc] jk l k; fud vfHk; kf=dh foHkx] , uvkbVh] fr : fPpjkiYyh (Mk- d- : def. k] uuk&ck; k Vkl y'ku vu l /kku ij J"BRkk dk dUn] chvkbVh] vUuk fo' ofo | ky;] fr : fPpjkiYyh (Mk- th- t- tukoh] ik/; kid , o v/; {k] uuk foKku , o ik |kfxdh] rfey ukM df" k fo' ofo | ky;] dk; EcUkj rFkk Hkk-d-v-i-&, uvkj l hch d oKkfudk u bl cBd e Hkkx fy; kA

vkbi hvkj ij fo' k" k 0; k [; ku

vkbi h IY; 'k l] cxy: dh , d ifrf" Br iVV , tV Jherh fxj tk Jhke u ^iVVk d ckj e Kku dh vko'; drk rFkk vkbi hvkj dk , d flgkoykdu* fo" k; ij 30 vDrcj 2017 dk Hkk-d-v-i-&, uvkj l hch e 0; k [; ku fn; kA



fp= % ^dy dh mRikndrk c<ku d fy, uuk ik |kfxdh d vui; kx* fo" k; ij ifjppk cBd d ifrHkxh

vfrfFk l dk; dk fo' k" k 0; k [; ku

Mk- t; 'kdj lce.; u] ik/; kid %o{ k Qy i tuu vkj toik |kfxdh] X; , YQ&okbuyM] dukMk u ^Qy foKku e ub ixfr; k* fo" k; ij 16 ekp 2018 dk Hkk-d-v-i-&, uvkj l hch e , d okrk iLrr dhA

df" k mUur eyk& 2018

Hkk-d-v-i-&, uvkj l hch }kj 17 ekp 2018 dk df" k mUur eyk&2018 dk vk; ktu fd; k x; kA fd lkuk d bl dk; Øe e vkl& ikl d jkT; k t l fr : fPpjkiYyh] d : j] ukekDdy] indkVb] ijecy vkj vfj; kyj d ftyk l vk, 300 l vf/kd dyk mxku oky fd lkuk u Hkkx fy; kA Hkkjrh d ekuuh; i/ kkue=h d lEck/ku dk LFky ij l tho njn'ku i l k j . k fd; k x; k rFkk mud Hkk" k . k d l k j & l {k i dk vuokn fd lkuk o vU; ifrHkfx; k d l e {k iLrr fd; k x; kA Jh , u- jfo pUnu] vk; Dr] fr : fPpjkiYyh uxj fuxe bl l ekjg e e [; vfrfFk FkA Jh ef. kdkrj u; ; j] mi egkic/kd] Hkkjrh; LVV cd] fr : fPpjkiYyh vkj Jh d- ukVjktu] dk; Øe fun'kd] vkdk'kok. kh] fr : fPpjkiYyh e Hkh bl ey e fd lkuk dk lEckf/kr fd; kA Mk- , l- mek] fun'kd] Hkk-d-v-i-&, uvkj l hch u fd lkuk dk dk; Øe d egRo d ckj e crk; k rFkk fMi flpkb] fuEu fuo' k dh df" k vkj enk LokLF; ic/ k t l h mUur ik |kfxd; k viuku dk vujk/k fd; k] rkfd fd lkuk dh vkenuh nxuh dju dk y { ; iklr dju d fy, fvd k Å df" k dk viuk; k tk l dA Mk- vkb- jfo vkj Mk- vkj- rxoy] Hkk-d-v-i-&, uvkj l hch u Øe' k ¶; tfj; e e>ku jkx rFkk l [k d ic/ k ij 0; k [; ku fn, A



fp= % Mk- , l- mek] fun'kd] Hkk-d-v-i-&, uvkj l hch dk; Øe d egRo d ckj e crykr g,



14 ifrf"BrvfrfFk

uke	frfFk
Mk- MCY;- , I-f<Yy[k] I gk; degkfun'kd %ckxokuh% Hkk-d-v-i-] ubfnYyh	1 viy 2017
Mk-,u-d- d".kudekj] ck;koflVhbVju'kuy&nf{k.krFkk e/; ,f'k;k d {k=h; ifrfuf/k] ubfnYyh	1 viy 2017
Jhvkj- jfoUn] mi egkic/kd] ,ihMk] cxy :	20 viy 2017
Mk- tokgjyky] vf/k"Bkrk] ,plhvkvjvkvb] Vh,u,;] dk;EcUkj	23 eb 2017
Mk- jkuhLouu] vkbvkbVh, vkjd; ,y] cfYt ;e	20 vkj 21 vxLr 2017
Mk- ,yuckmu] vkbvkbVh,] r t kfu;k	20 vkj 21 vxLr 2017
Mk- jkcuh] ,u,vkvk] ;xkMk	20 vkj 21 vxLr 2017
Mk- Ih- vkunjked".ku] fun'kd] vkbvkb,QihVh] r t koj	21 vxLr 2017
Jherhfxj tkJhke] iVv , tV] vkbihlY; 'k l] cxy :	30 vDrcj 2017
Mk- %Jherh% th-t- tukoh] ik/;kid ,o v/;{k] uukfoKku ,oik kfxdhfoHkkx] Vh,u,;] dk;EcUkj	25 uoEcj 2017
Mk- d- Ice.;u] ukckM] ihBik/;kid] uukfoKku ,oik kfxdhfoHkkx] Vh,u,;] dk;EcUkj	25 uoEcj 2017
Mk- t- 'kjpnpUnckc] ,uvkbVh] fr : fPpjkiYyh	25 uoEcj 2017
Mk- d- : def.k] QkekL;fVdyik kfxdhfoHkkx] vUukfo'ofokiy;] fr : fPpjkiYyh	
Mk- , I-,u- ik.M] io l gk; degkfun'kd %ckxokuh foKku% Hkk-d-v-i-] ubfnYyh	18 vkj 19 tuojuh 2018
Mk- MCY;- , I- f<Yy[k] I gk; degkfun'kd %ckxokuh foKku% Hkk-d-v-i-] ubfnYyh	18 vkj 19 tuojuh 2018
Mk- ih- vkundekj] iofun'kd] Hkk-d-v-i-&,uthl h,Qih] gnjkckn	18 vkj 19 tuojuh 2018
Mk- ,d- feJk] io v/;{k] Ihvkb, l ,p] y[kuA	18 vkj 19 tuojuh 2018
Mk- ,u- dekj] iovf/k"Bkrk] Vh,u,;] ukxjdfkoy	18 vkj 19 tuojuh 2018
Mk- vkundekj flg] mi egkfun'kd %ckxokuh foKkuvkjQly foKku% Hkk-d-v-i-] ubfnYyh	17 Qjoj 2018
Mk- ch-,e-lh- jMMh] Hkk-d-v-i-] fo'k"kvkef=r lnL; rFkkiodiyifrMk-okb,lvkj,p;	17 Qjoj 2018
Mk- ,e-vkj- fnu'k] fun'kd] Hkk-d-v-i-&vkbvkb,pvkj] cxy :	17 Qjoj 2018
Mk- , I- jk tu] Hkk-d-v-i-&lhvkb, l ,p] y[kuA	17 Qjoj 2018
Mk- ,e-, l- yMkfuk;] Hkk-d-vi-&lh hvkvjvkb] ukxi j	17 Qjoj 2018
Mk- , I-Mh- l kor] Hkk-d-v-i-&,uvkj l h t h] i .k	17 Qjoj 2018
Mk- ,p-i-h- eg'ojlik] ifj;k t uk l e lo; d] rkM] d l j x k M	17 Qjoj 2018
Mk- euh'knk l] Hkk-d-v-i- e[;ky;] ubfnYyh	17 Qjoj 2018

uke	frfFk
Mk- t; 'kdj lce.;u] ik;/kid %o{k Qyituu ,o toik kfxdh½ X; ;YQ&okbuyMfo'ofok ky;] dukMk	16 ekp 2018
Jh ,u- jfopUnu] vk;Dr] fr : fPpjkiYyhuxjfuxe] fr : fPpjkiYyh	17 ekp 2018
Jhef.kdkruuk; j] mi egkic/kd] Hkkjrh; LVVcd] fr : fPpjkiYyh	17 ekp 2018
Jh d- uVjk tu] dk; Øefun'kd] vdkd'kok.kh] fr : fPpjkiYyh	17 ekp 2018

15 efgykvk dk l'kfDrdj.k

if'k{k.k dk fooj.k	frfFk
Hkk-d-v-i-&,uvkj l hch] fr : fPpjkiYyh] rfeyukMedy dk j'kkvkjbl dmRikn& ,e@xkey;] fr : fPpjkiYyh dh 19 xkeh.kefgykvk d fy, bldkegRovkj l Hkkoukfo"K; ijvk; kft r if'k{k.k	30 eb 2017
Hkk-d-v-i-&,uvkj l hch] fr : fPpjkiYyh] rfeyukMedy dk j'kkvkjbl dmRikn& ,e@xkey;] fr : fPpjkiYyh dh 24 xkeh.kefgykvk d fy, bldkegRovkj l Hkkoukfo"K; ijvk; kft r if'k{k.k %ukckM }kjk ik; kft r½	3 tykb 2017
vfj;kyjft y] rfeyukM dh efgykvk d fy, 25 Lo; l gk; rk l egk ½, l, p t h½ dkHkk-d-v-i-&,uvkj l hch] fr : fPpjkiYyh] rfeyukMedy d eY; o/ku ij if'k{k.k	23 uoEcj 2017

16 dkfed

16-1 LVkQ l ekpjk

uke	fo"K;	frfFk
Mk- jket ;e] i/kkuoKkfud	ofj"BoKkfud %Qy foKku½ l i/kkuoKkfud %ckxokuh½ d in ijinkUur	10 vDrcj 2016 l
Mk- ,- f=x.kukoy] oKkfud	Hkk-d-v-i-&dUnh; uhcoxh; Qyvul/kku l LFkku] ukxi jeLFkkukrfjr	3 uoEcj 2017
Mk- ch- l rh'k] ofj"Bi'kk l fudvf/kdkjh	Hkk-d-v-i-&Hkkjrh; pkoyvul/kku l LFkku] gnjkckneLFkkukrfjr	22 viy 2017
Mk- ih- jfopkeh] ofj"Brduhdhvf/kdkjh	ih, p-Mh- mikf/k l l Eekfur	17 uoEcj 2017
Jh oh- l Yo jkt] ofj"Brduhdh l gk; d	rduhdhvf/kdkjh d in ijinkUur	5 ekp 2017 l
Jh Vh- l dj] ofj"Brduhdh l gk; d	rduhdhvf/kdkjh d in ijinkUur	10 ekp 2017 l



uke	fo"k;	frfFk
Jh d- dkejk t] ofj"Brduhdhlgk;d	rduhdhvf/kdkjh d in ijinkUur	10 ekp 2017 I
Jh oh- eukguj] rduhdhlgk;d	ofj"Brduhdhlgk;d d in ijinkUur	18 tu 2017 I
JhvkJ- ekgujk t	voj J.kh fyfid d in ijinkUur	21 viy 2017 I
Jhih- ekgu] ofj"Brduhdhlgk;d %okgu pkyd½	lokfuok	31 tykb 2017

16-2 LVkQ dh fLFfr

oKkfudLVkQ

Ø-I-	uke	inuke
1-	Mk- , I- mek	fun'kd
2-	Mk- ch- inukHku	i/kku oKkfud ¼dhVfoKku½
3-	Mk- t- ijf.k	i/kku oKkfud ¼dhVfoKku½
4-	Mk- vkj- rxoy	i/kku oKkfud ¼ikni jkxfoKku½
5-	Mk- IYojk tu	i/kku oKkfud ¼ikni jkxfoKku½
6-	Mk- ,e- eby okxuu	i/kku oKkfud ¼ikni tojlk;ufoKku½
7-	Mk- vkb- jfo	i/kku oKkfud ¼Qly dkf;dh½
8-	Mk- oh- dekj	i/kku oKkfud ¼ckxokuh½
9-	Mk- d-t- t; HkkLdju	i/kku oKkfud ¼enk foKku½
10-	Mk- d-,u- f'kok	i/kku oKkfud ¼ckxokuh½
11-	Mk- , I- ckfdd; jkf.k	i/kku oKkfud ¼toik kfxdh½
12-	Mk- ,e-, I- IjLorh	i/kku oKkfud ¼ckxokuh½
13-	Mk- ,e- ykxukFku	i/kku oKkfud ¼ikni jkxfoKku½
14-	Mk- Mh- jket;e	i/kku oKkfud ¼ckxokuh½
15-	Mk- Ij'kdekj	ofj"B oKkfud ¼ckxokuh½
16-	Mk- ih- fxfjckc	oKkfud ¼I=dfe foKku½
17-	Mk- Ih- vujk/kk	oKkfud ¼toik kfxdh½
18-	JhvkJ- uVjk tu	oKkfud ¼vkfFkd ouLifrfoKku½

rduhdh LVkQ

Ø-I-	uke	inuke
1-	Mk- ih- nj	lgk; d e[; rduhdh vf/kdkjh ¼ i{k=½
2-	Mk- , I- iyfupke	ofj"B rduhdhvf/kdkjh ¼ i{k=½
3-	Mk- ih- jfopkeh	ofj"B rduhdh vf/kdkjh ¼ i=dkfjrk½
4-	I JhVh- vfurkJh	ofj"B rduhdh vf/kdkjh ¼ i{k=½
5-	I JhIh- Ixk; ket dyhu	rduhdh vf/kdkjh ¼ dEl; Vj ikxkej½
6-	JhMh- jkeplnefr	rduhdh vf/kdkjh ¼ f l foy vkofjl ; u½
7-	Jh oh- IYojkt	rduhdh vf/kdkjh ¼ i{k=½
8-	JhVh- Idj	rduhdh vf/kdkjh ¼ i; kx'kkyk½
9-	Jh d- dkejk t	rduhdh vf/kdkjh ¼ i; kx'kkyk½
10	Jhvkj- fip;er	ofj"Brduhdh lgk; d ¼ i{k=½
11-	Jh ,u- ekjher	ofj"B rduhdh lgk; d ¼ i; kx'kkyk½
12-	Jh ,e- cnhukFk	ofj"B rduhdh lgk; d ¼ i{k=½
13-	Jh oh- eukgju	ofj"B rduhdh lgk; d ¼ okgu pkyd½

i'kk lfud] y[kkijh{kk ,o y[kk rFk klgk;h LVkQ

Ø-I-	uke	inuke
1-	I JhIh- xkerh	lgk; dfoUk ,oy[kk vf/kdkjh
2-	Jhvkj- d".kefr	lgk; d i'kk lfud vf/kdkjh
3-	Jh ,e- d".kefr	fu t h l fpo
4-	Jhih- e: xu	lgk; d
5-	Jhvkj- Jh/kj	o; fDrd lgk; d
6-	I Jh , I- nxkorh	ioj J.kh fyfid
7-	Jhvkj- uhye?k ' ;key dUuu	vk'kfyfid xM&3
8	I Jh , -oh- I tk	voj J.kh fyfid
9-	Jhvkj- ekgujkt	voj J.kh fyfid
10-	Jh oh- ikM;u	d'ky lgk;h depkjh
11-	Jh oh- rxjkt	d'ky lgk;h depkjh
12-	Jhih- dkejk t	d'ky lgk;h depkjh
13-	Jh oh- x.k'ku	d'ky lgk;h depkjh
14-	I Jh d- efj;key	d'ky lgk;h depkjh



17 vu; Iipuk

jk"Vh; dyk mR lo&2017

Hkk-d-v-i-&,uvkj l hch u 21&23 tykb 2017 dk ,lh vkj vkjvkbj enjj rfey ukM e vk;kftr ^jk"Vh; dyk mR lo* e Hkkx fy; kA bl dk vk;ktu dQMj'ku vkQ bfM; u bMLVh] pUub }kjk Vh,u,;] Hkk-d-v-i-&,uvkj l hch] ,u,pch] ukckM rFkk vU; vk|kfxd lk>nkjk d lg;kx l fd;k x;k FkkA mR lo dk mn?kkVu df"k] okfudh] lgdkfjr[k] jktLo vkj f'k[kk l fgr ikp jkT; ef=; k u fd;kA bl mR lo e mifLFkr vU; egkuHkkok Hkh 'kkfey Fk % Jh 'kdhy ih- vgen] l;Dr lfpo] df"k ,o fd lku dY;k.k e=ky;] Hkkjr ljdkj(Jh xxunhi flg cnh] lgk;d mRiknu vk;Dr ,o i/kku lfpo] df"k foHkkx] rfey ukM ljdkj(Jh d- ohjk jk?ko jko] lekgrk(Mk- d- jkek lkeh] dyifr] Vh,u,;(Mk- , l- mek] fun'kd] Hkk-d-v-i-&,uvkj l hch(Jh , l- ukxj vyh ftUuk] l hth,e] ukckM(Jh ih jfopUnu] v/;{k] rfey ukM jkT; ifj"kn] lhvkvbvkbA Hkk-d-v-i-&,uvkj l hch u dy dh 100 l vf/kd fdLek d xPN rFkk dy d 25 l vf/kd eY;of/kr mRikn t l dyk fQx] dy d i"i dk vpkj] Hku dj r;kj fd, x, LoYikgkj dy d vkV ij vk/kkfjr f'k'k vkgkj] ddht rFkk dy d j'k ij vk/kkfjr nLrdkjh mRikn inf'kr fd,A



fp= % fun'kd] Hkk-d-v-i-&,uvkj l hch jk"Vh; dyk mR lo&2017 e rfey ukM d ef=; k d l kFk

jk"Vh; dyk mR lo&2018

Hkk-d-v-i-&,uvkj l hch u lVj Qkj buko'ku bu l kbl ,M l k'ky ,Dlu %lhvkb,l,l,%] djy }kjk 17&21 Qjoh 2018 dk fr:vurije] djy e vk;kftr ^jk"Vh; dyk mR lo&2018* e Hkkx fy; kA bl volj ij ^dy ij jk"Vh; lfeukj* vk;kftr fd;k x;k ftle dUn d oKkfudk vkj Nk=k u vx.kh iLrrhdj.k rFkk vul/kku lkj iLrr fd,A bl ij vk;kftr in'kuh e dUn u dy dh 50 fdLek d xPN rFkk eY;of/kr mRikn inf'kr fd,A



fp= % Mk- jk/kk egku flg] ekuuh; df"k ,o fd lku dY;k.k e=ky;] Hkkjr ljdkj] Hkk-d-v-i-&,uvkj l hch d LVky e in'kk dk n[kr g,

fo'o enk fno l

Hkk-d-v-i-&,uvkj l hch u Hkk-d-v-i-&df"k foKku dUn] fl : xkef.k rFkk Hkk-d-v-i-&df"k foKku dUn] d : j d lg;kx l 5 fnlEcj 2017 dk ^fo'o enk fno l* euk; kA Mk- , l- mek] fun'kd] Hkk-d-v-i-&,uvkj l hch u bl volj ij yxkb xb in'kuh dk vk;ktu fd;k rFkk fd l k d enk LokLF; dkM forfjr fd,A dUn d oKkfudk u dy dh [krh rFkk enk LokLF; ic/k ij 0;k[;ku fn,A rfey ukM d fr : fPpkiYyh] d : j vkj ukeDdy fty d yxHkx 800 fd l k u bl dk;Øe e Hkkx fy; kA

vk/k in'k jkT; Ijdkj d lkFk ,evklh ij gLrk{kj

Hkk-d-v-i-&,uvkj l hch rFkk vk/k in'k jkT; Ijdkj d chp 16 vDrcj 2017 dk ,d ^lg;kx d Kkiu* ij gLrk{kj fd, x,A Mk- , l- mekj fun'kd] Hkk-d-v-i-&,uvkj l hch rFkk Jh ,e- fxfj tk 'kdj] lfpo] m|kx rFkk okf.kT; foHkkx] vk/k in'k Ijdkj u vk/k in'k d ekuuh; e[;e=h Jh ,u- pUn ckc uk;M dh mifLFkr e bl lg;kx Kkiu ij gLrk{kj fd,A bl Kkiu d vulkj Hkk-d-v-i-&,uvkj l hch eY; J[kyk ic/k] dy d fu;kr e lgk;rk nu] tfod mRiknu rFkk vif'k"V d mi; kx dh fn'kk e ik|kfxdh fodflr dju d fy, ^Kku d lk>nkj* d : i e dk; djxkA ;g dUn fd lkuk rFkk m|fe;k dk if'k{k.k Hkh nxk rkfd ?kij vkj fu;kr cktkj d fy, nIh o okf.kT; d fdLek dk c<kok fn;k tk l dA

,uvkbVh] fr : fPpjkiYyh d lkFk ,evk, ij gLrk{kj

Hkk-d-v-i-&,uvkj l hch rFkk ,uvkbVh] fr : fPpjkiYyh d chp 26 tykb 2017 dk ^le>krk Kkiu* ij gLrk{kj fd, x,A Mk- , l- mekj fun'kd] Hkk-d-v-i-&,uvkj l hch rFkk Mk- feuh 'kk th Fkkel] fun'kd] ,uvkbVh u ,uvkbVh] fr : fPpjkiYyh e lcf/kr lLFkkuk dh vkj l le>krk Kkiu ij gLrk{kj fd,A nkuk gh lLFkku df"e Nk;kdu i.kkfy;k] byDVkfud ;fDr;k] lkj Åtk d vui;kxk] uuk ik|kfxdh rFkk bVuf'ki d fy, Nk=k dh lph cuku vkj fd lku lenk; d ykHk d fy, LukrdkÜkj vul/ kku dk;Øek dk r;kj dju o fodflr dju gr fopkj o fo'k"Krk d vknku&inku ij lger g,A

d,ulhbVh d lkFk ,evk, ij gLrk{kj

Hkk-d-v-i-&,uvkj l hch] fr : fPpjkiYyh rFkk dkxukM vfHk;kf=dh ,o ik|kfxdh egkfo|ky; %d,ulhbVh] FkfvV;ke] rfey ukM d chp 11 vDrcj

2017 dk ,d ^le>krk Kkiu* ij gLrk{kj g,A Mk- , l- mekj fun'kd] Hkk-d-v-i-&,uvkj l hch rFkk Mk- ih-, l-d-vkj- ifj;k lkeh] v/;{k] d,ulhbVh u dUn e le>krk Kkiu ij gLrk{kj fd,A bl le>kr d vrxr uk'kd thok dh igpku d fy, to l l j rFkk Nk;kdu ik|kfxdh fodflr dju] dy d rKM x, xPNk d ifjogu d fy, oguh; dcy dkj ifjogu i.kkyh r;kj dju rFkk lkj 'kfDr d mi;kx d ek/ ;e l gfjr ik|kfxdh dk c<kok nu rFkk vU; {k=k e dk; dju ij fo'k" /;ku fn;k tk,xkA bl le>kr e bVuf'ki d fy, Nk=k dk lphc) dju rFkk Hkk-d-v-i-&,uvkj l hch e LukrdkÜkj vul/ kku dk;Øek d fy, okfNr lgk;rk Hkh inku dh tk,xhA



fp= % , l- mekj fun'kd] Hkk-d-v-i-&,uvkj l hch rFkk Mk- ih-, l-d-vkj- ifj;k lkeh] v/;{k] d,ulhbVh] f=ph] lg;kx vul/ kku dk;Øek ij le>krk Kkiu dk vknku&inku djr g,

ncb dk ulnu dy d fu;kr d fy, ,evk; ij gLrk{kj

Hkk-d-v-i-&,uvkj l hch rFkk ,ihMk d chp l h ikV d ek/;e l e l l Q;j ,DI ikV l bfm;k fyfeVM] dkfPp dh lk>nkjh e ulnu dy d fu;kr d fy, ikjLifjd lg;kx dk fu.k; fy;k x;kA Mk- , l- mekj fun'kd] Hkk-d-v-i-&,uvkj l hch rFkk Jh vkj- jfoUn] mi egkic/kd] ,ihMk] cxy : u bl ikjLifjd le> Kkiu ij 20 viy 2017 dk gLrk{kj fd,A bl Kkiu dk mnn'; vkjHk e dy dh ulnu fdLe d fy, vkj



m l d i 'pkr u; iou fdLe d fu;kr d fy, lenh ikVkdKy fodflr djuk gA



fp= % Mk- , l- mekj fun'kd] Hkk-d-v-i-&,uvkj l hch] f=ph ncb dk uUnu dy d fu;kr ij ifj;ktuk d fy, Jh vkj- jfoUn] mi egkic/kd] ,ihMK] cxy: dk le> Kkiu l kir g,

df"k f'kfk fno l

Hkk-d-v-i-&,uvkj l hch e Hkkjr d io jk"Vifr vkj df"k e=h Hkkjr jRu Mk- jktUn ilkn dh t;rh d vol j ij 4 fnlEcj 2017 dk ^df"k f'kfk fno l* dk vk;ktu fd;kA bl vol j ij fo|ky;k d cPpk rFkk egkfo|ky; d Nk=k d fy, i'u&ep ifr;kfxrk] fuc/k y[ku rFkk okn&fookn ifr;kfxrk t l dk;Øe vk;kft r fd, x, rFkk ijLdkj Hkh forfjr fd, x,A



fp= % df"k f'kfk fno l ij Hkk-d-v-i-&,uvkj l hch d LVkQ d l kFk Nk=

vkB, l vk 9001%2015

x.koUkk ic/k i.kkfy;k %D; ,e, l ½ ifØ;kvk dk viuku d fy, i.kkyh dk l pk: cuku d l kFk&l kFk ble fujrj l/kkj d fy, Hkk-d-v-i-&,uvkj l hch dk vkB, l vk 9001 % 2008 l vkB, l vk 9001% 2015 rd ikuur fd;k x;kA vkB, l vk iek.khdj.k fudk; d

y[kkijh{kdk uker% Jh ch- dkfrd;u] fun'kd ,o vx.kh y[kkijh{kdk o Jh oh- f'kodekj] y[kkijh{kdk] DoLV lfvQd'ku ¼ ikboV½ fyfeVM] pUub u 21 viy 2018 dk lLFku dk nkjk fd;k rFkk Hkk-d-v-i-&,uvkj l hch vkB, l vk 9001%2015 iek.k&i= l iekf.kr fd;kA

^dy rFkk lyfVu dk iHkkfor dju oky fo"kk.k d fy, vfr mRd"V vkf.od unkfudh dh rduhdk* ij vrjjk"Vh; if'kfk.k

Hkk-d-v-i-&,uvkj l hch u 15&29 exp 2018 d fy, Hkkjr&vYhdh Qkje lfeV&lll d vrxr ^dy rFkk lyfVu dk iHkkfor dju oky fo"kk.kvk d fy, mRd"V vkf.od unkfud rduhdk* ij ,d vrjjk"Vh; if'kfk.k dk;Øe dh etcuh dhA bl if'kfk.k e dU;k] dkekjk l] lMku] bFkfi;k vkj eykoh d uk if'kfk.k.kkFk;k u Hkx fy;kA dUn rFkk ckgj l vk, fo'k"Kk }kjk l l k/ku 0;fDr;k d :i e unkfud rduhdk d fofHkuu igyvk ij dy 18 0;k[;ku fn, x,A dy d pkj fo"kk.kvk d fy, gekjh iR;kf;r ijh{k.k i;kx'kkyk e fodflr dh xb fofHkuu igpku rduhdk ij iR;{k o rRdky if'kfk.k inku fd;k x;kA if'kfk.k.kkFkh bl idkj d if'kfk.k l cgr l r"V Fk rFkk unkfudh ij dUn }kjk fn, x, if'kfk.k l mUg cgr ykHk gvka



fp= % Hkk-d-v-i-&,uvkj l hch }kjk 'kkldh; fo|ky; dk oqk dk forj.k

^LoPN Hkkjr* l c/kh xfrfof/k;k

Hkk-d-v-i-&,uvkj l hch u Hkkjr ljdkj }kjk vkjHk fd, x, LoPNrk vfHk;ku dk c<kok nu rFkk bl ykdfi; cuku d fy, vud xfrfof/k;k pykBA

vrjjk"Vh; ;kx fno l

fnukd 20 tu 2017 dk ^vrjjk"Vh; ;kx fno l* dk vk;k tu fd;k x; kA t; jxk upj D;kj gkLiVy vkj ;kx vul/kku dUn] fr : fPpjkiYyh d InL; k u Hkk-d-v-i-&,uvkj l hch d LVkQ d le{k fofHkUu ;kx enkvk dk in'ku fd;kA



fp= % LoPN Hkkjr fe'ku d nkjku Hkk-d-v-i-&,uvkj l hch dk LVkQ rFkk LVkQ DokVj

xfrfof/k	ekg
lok fno l dk vk;k tu(lex LoPNrk fno l dk vk;k tu(lo= LoPNrk dk vk;k tu	flRecj 2017
fr : fPpjkiYyh d vklikl d ^i;Vd LFkyk* dh IQkb(Hkk-d-v-i-&,uvkj l hch ifj l j e fo'k" LoPNrk vfHk;ku dk 'kHkkjHk	vDrcj 2017
jki.k rFkk mld i'pkr ofkk dh n[kHkkY] mfpr j[kj[kko rFkk ikFkfed folky; d cPpk d clp folky; d 'kpkky;k d mi;kx d egRo d ckj e tkx: drk(viuk, x, xkok] dhjhdYeM d vxuokMh d cPpk dk l jfkr o LoPN i; ty miyCk dju d fy, uy e yxk, x, LVuyl LVhy d i; ty d ik=k dk forj.k(vxuokMh cPpk d lQ&lQb l cBu d fy, Q'k ij fcNkb tku okyh pVkb;k dk foj.k(iou rFkk i'kvk dh pjkb l NkV ik/kk dh l jfkk d fy, ofkk dh ckM yxku dk iko/kku	uoEcj 2017
dk;ky; ifj l j e lQb rFkk [kjirokj dk gVuk(xM<k dh [knkb] ofkkjki.k rFkk ofk dh ckM yxku(LoPN Hkkjr ukj fy[kh Vh&'KV d forj.k d ek/e l ogr vfHk;ku dk vk;k tu(vk l & i k l d xkok] LVkQ rFkk , l vkj, Q] vkj,] ih, p-Mh- Nk=k l fgr mud ifjokj InL; k dk Hkh 'kkfey djr g, LFkkuh; yxk d l kFk 31 fnlEcj 2017 dk fo'k" lQb vfHk;ku	fnlEcj 2017
Hkk-d-v-i-&,uvkj l hch d vul/kku Qke ij i; kxkRed Cykdk dh lQb o ogk l [kjirokj gVku ij fo'k" vfHk;ku	tuojh 2018
vkj, l h d v/;k rFkk InL; k }kjk vul/kku Qke e ofkkjki.k(vkj, l h d InL; k rFkk Hkk-d-v-i-&,uvkj l hch d LVkQ }kjk fo'k" lQb vfHk;ku vkj ikxy dk vk;k tu	Qjojh 2018
dUn }kjk viuk, x, xkok d ikFkfed 'kkldh; folky; l l ftr to vi?kVu'khy rFkk xj&vi?kVu'khy dpj dk ,d= dju d fy, dMknkuk dk forj.k(?kyy fdfj;ku dh en [kjnu d fy, ikFkfed folky; d cPpk dk to vi?kVu'khy Fkyk dk forj.k] folky; d cPpk dk LoPNrk 'kiFk fnykuk] folky; @d{kkvk l l ftr to vi?kVu'khy rFkk xj&vi?kVu'khy dpj dk vyx dju dh fof/k; k dk vH; k l djuk(viuk, x, xkok e NkV ndkunkj dk to vi?kVu'khy Fkyk dk forj.k	ekp 2018



[ky&dn

Hkk-d-v-i-&,uvkj l hch u 9&13 vDrcj 2017 dk dk; EcÙkj e vk; kft r nf{k.k {k= d fy, Hkk-d-v-i- vrj&ILFkxr [ky&dn ifr; kfxrkvk e Hkkx fy; kA bl dk; Øe e 10 InL; k d , d ny u cMfeVu] Hkkyk Qd] pDdk Qd] 'krj t rFkk dje t l h fofHkUu ifr; kfxrkvk e Hkkx fy; kA

Lor=rk fno l rFkk x.kr= fno l lekjk

Hkk-d-v-i-&,uvkj l hch e 15 vxLr 2017 vkj 26 tuojuh 2018 dk Øe'kkl Lor=rk fno l vkj x.kr= fno l vk; kft r fd, x, A Mk- , l- mekj fun'kd] Hkk-d-v-i-&,uvkj l hch] u /otkjk.g.k fd; k vkj LVkQ dk lEckf/kr Hkh fd; kA

lfo/kku fno l

Mk- ch-vkj- vEcMdj dh 125 oh t; rh d vk; ktu d vol j ij Hkk-d-v-i-&,uvkj l hch d LVkQ u 27

uoEcj 2017 dk Hkkjr d lfo/kku dh iLrkouk dk ikB fd; kA

fgUnh i [kokMk

Hkk-d-v-i-&,uvkj l hch e 4&28 flrEcj 2017 dk fgUnh i [kokMk euk; k x; kA bl vol j ij xhr] i'u&ep] lekpkj&okpu vkfn t l h fofHkUu ifr; kfxrk, vk; kft r dh xb vkj ijLdkj Hkh forfjr fd, x, A

l;Dr fgUnh ifr; kfxrk & Vkfyd 2017

Hkk-d-v-i-&,uvkj l hch d LVkQ InL; k u 21 uoEcj 2017 l 12 fnlEcj 2017 rd fr : fPpjkiYyh e vk; kft r l;Dr fgUnh ifr; kfxrk, Vkfyd&2017* e lfØ; : i l Hkkx fy; kA Jh vkj- fipber vkj ih- fxfjckc u n'; &J0; i'u&ep e Øe'kkl iFke vkj rrrh; ijLdk iklr fd, A



vuc/k&I

I LFKkudhifj ;k tuk,

ifj ;k tuk dk uke	i/kkuvUo"kd
Qlyl/kkj	
1- Hkkjr; miegk}hi edy d vkuof'kd l l k/kuk dk l/kkjkvic/k	, l-mek
2- ijijxrituu d ek;/e l dy dk l/kkj	, l- cdh; kjuh
3- dyk ½E; l k itkfr; k½ e ¶; tfj; e e>kuifrjk/k d fy, lEc)	, e-, l- l jLorh
ekufp=.k v/; ; ukgrx.kfof'k"Vekdj k fodk l	
4- xj&ijijxrituu d ek;/e l ¶; tfj; e e>kuifrjk/k d fy,	, e-, l- l jLorh
okf.kfT; dfdLexkMu; u ¼dofM'k&, , ½ dk l/kkj	
5- dyk ½E; l k itkfr; k½ d l/kkj d fy, nkgjvxf.kr k dk mRiknu	Mh- jket; e
6- okf.kfT; dfdLe u; iou ¼, ch½ vkjxkMu; u ¼, , , ½ d J"BDykuk	vkj- uVjktu
dh igpku o mudkeY; kdu	
QlykRiknu ,oIL; kÙkjik kfxdh	
7- dyeik"kdRok dh xfrdh dk v/; ; u	d-t- t; HkkLdju
8- fVdkÅenkLokLF; rFkkik"kf.kd l j}kk d fy, dy dh tfod [krh	d-t- t; HkkLdju
9- dy dh c<h mRikndrk d fy, DyEi d ic/k dh ik kfxdh dk	oh- dekj
fodk l	
10- dyeiÙkhmRiknu c<ku d fy, io ,oi'pIL; rduhd k dk fodk l	d-, u- f'kok
11- ?kjyrFkkfu; krck t jk d fy, dyrFkklyVue	d-, u- f'kok
: ikrfjrokrkoj.kidftxrduhd k dk fodk l	
12- dy d vkV l fMtkbuj [kk] inkFkk dk fodk l vkjifrjk/k LVkp	ih- l j'kdekj
d dk;	
13- dyemPprkiekurFkkenkeueh dk ifrcy ½	vk b- jfo
mPprkiekurFkkenkeueh dh deifrcyk d	
vrxrdyemPprkieku dh lfg".krk dh ;kf=dh rFkkbuifrcyk	
dk ic/k	
14- dy d Qyk d ifjiDou dk tojlk; ufoKkurFkkdy d	, e- ebyoXuku
i"irFkkQy l iklrguokymPpeY; oky ; kfxdk dk y{k.k&o.ku	
QlykRiknu	
15- uk'kd thoic/k d fy, dy d ruk ?kuj vkfM; kikj lykxhdkfy l	ch- ineukHku
d Qhjkeku dh igpku	
16- HkkjredyrFkklyVueuk'kd thoekufp=.k	t- ijkuh
17- dy d dodh; rFkk thokf.odjxkijvUo"kvkjmudkic/k	vkj- rxoy
18- dy d idn l Mu dk lo{k.k} grfoKku ,oic/k	, e- ykxukFku



	ifj;k t uk dk uke	i/kkuvUo"kd
19	ik"kd&fo"kk.k&okgd&i; koj.kvrjfo; kvkd k le>u d fy, vkf.od vkj- IYojk tu ; fDr; krFkkdy d fo"kk.kvk d ic/k d fy, vkj,u,vkb	
20-	dyeik"kd&chVhohvrjfo; k dk ikfV; kfedfo'y"kk.k	Ih- vujk/kk
21-	E; Ikl=dfe; k dh fofo/krk] thofokku] 0; ogkjrFkkmudhvrjfo; kvkijvUo"kk.k	ih- fxfjck

II. Hkk-d-v-i-&fuf/k lgk; rkikl rifj; k t uk,

	ifj;k t uk dk uke	i/kku ,o lg& vUo"kd
1-	Qlykeijk thfu; kijuVod ifj; k t uk&dydk; kRed thukfeD I %fIxkVkd vkj I [kk ?kVd½	, I- mek vkj- rxoy , I- cdh; kjuh , e-, I- IjLorh vkb- jfo
2-	dydkIøferdjuoky¶; tfj; evkDIhLikje ,Q-, Iih- D; cI d Iokf/kdmxiHkn dk lo{k.k] y{k.k&o.kuvkjic/k	vkj- rxoy , I- cfd; kjuh
3-	VhdkrFkkunkfudhijd I kfV; evu I/kkuep	vkj- IYojk tu Ih- vujk/kk
4-	dyeIL; kÜkjgkfu; k dk eY; kdu	d- ,u- f'kok

III. vU; , tfl; k dh fuf/k lgk; rkikl rifj; k t uk,

	ifj;k t uk dk uke	fuf/k dk lkr	i/kku ,o lg& vUo"kd
1-	vYhdk d xVyDI {k= eNkVhtkr d fd I kuk d fy, dy dk I/kkj& ¶; tfj; e e>kuifrjk/khfdLefo dflrdjddy d mRiknueof) vkjNkVhtkr d fd I kuk d I kFkykHkeHkxhknkjh	vkbvkbVh,	, I- mek , I- cdh; kjuh vkj- rxoy , e-, I- IjLorh
2-	dyejxifrjk/k dk ck; kQkfVfQd'kuvkjfodk I ?kVd 1 % ikfoVfku , %ihoh, % dkLVDV d I kFkHkjr; dy dk ck; kQkfVfQd'kuvkjeY; kdu ?kVd 2 % ykgdkLVDV I ; DrHkjr; dy dk ck; kQkfVfQd'kuvkjeY; kdu ?kVd 3 % Hkjr; I k>nkjkdvlyhfo"kk.keDr vkb,e,QIhmiyC/k djku d I kFk&I kFk I Fkyh d fy, dkjxjb I h, I dk fodk I	MhchVh&D; ; Vh	, I- cdh; kjuh , I- mek , e- ebyoXuku , e- ebyoXuku vkbjfo d-t- t; HkLdju , I- mek , I- cdh; kjuh , e-, I- IjLorh

ifj;k t uk dk uke	fuf/k dk l kr	i/kku ,o lg& v lo"kd
3- dye ¶; tfj;e e>kumRiUudjuoky¶; tfj;e vkD l hL ikje ,Q-, l ih-D; cl dk vkf.od y{k.k& o.kurFkkbl dfVdkÅic/k ijif" k{k.kdk;Øe	MhchVh	vkj- rxoy , l- cdh; kjuh
4- Ård lo/kui/kk d fy, jk"Vh; iek.khdj.ki.kkyh	MhchVh&,Vh,y	vkj- lYojk tu ,e-, l- l jLorh
5- ifjrmRifjorutuu d ek;/e l j l Fkyhe ¶; tfj;e e>ku d fo#) fVdkÅifrjk/ l ;Drxj& jk l k;fudmRifjor d k fodk l	Mh, b	,e-, l- l jLorh vkj- rxoy , l- mek , l- cdh; kjuh
6- dyk %E; l k i t kfr; k d fy, [krh l c/khQ l yfof" k"VMh; , l fn"kkfun" k	ih i hoh vkj ,Qv kj,	, l- mek ,e-, l- l jLorh , l- cdh; kjuh
7- Hkkj rh; dy d vkuof"kd l l k/kuk d ic/k d fy, d l kfV;e	MhchVh& ,ubv kj	,e-, l- l jLorh , l- cdh; kjuh
8- vkuof"kd l l k/kueY; kduj Lo hLFkkul j{k.kvkjHkkjr d mÜkjioh {k= ei'kvk d vkgkj d :iedy dk iHkko	MhchVh& ,ubv kj	,e-, l- l jLorh , l-mek
9- ifrcylfg".kdy dh fdLek d fy, l Ei.k thuke o Vkl fØIVke v/; ;u	MhchVh& ,ubv kj	, l-cdh; kjuh , l- mek vkb- jfo
10- mÜkjioh {k= l dy d vkuof"kd l l k/kuk dk l dyu] eY; kduj iy [kuvkj l j{k.k	MhchVh& ,ubv kj	,e-, l- l jLorh ,e- ebyoXuku
11- mPpeY; okyiorh; {k= d dy dk Loik= cMieku ijio/ku	MhchVh& ,ubv kj	,e-, l- l jLorh vkj- rxoy vkb- jfo
12- mÜkjiohHkkjredy d l l k/kuk dh fofo/krk dk eY; kduj tuun0; l j{k.krFkkMVkcl dk fodk l	MhchVh& ,ubv kj	,e-, l- l jLorh , l- cdh; kjuh
13- dy dh mÜkjiohfdLek d ifre/keg o jxjk/k& ekMyVjhx.kk d mPpeY; okyiknij l k;uk dk y{k.k&o.ku	MhchVh& ,ubv kj	,e- ekbyoXuku vkb- jfo ih- l j'kdekj
14- mÜkjiohHkkjredy dh of) d ek;/e l fuEurkiekurFkkenkeueh dh deh l c/kh ifrcyk dk ic/k	MhchVh& ,ubv kj	vkb- jfo ,e- ekbyoXuku ,e-, l- l jLorh
15- rk t dy d fy, io ,oi'p l L; xPNk n[kHkkyic/k dh fof/k; k dk fodk l	MhchVh& ,ubv kj	ih- l j'kdekj d-,e- f'kok
16- dy dk eY;o/kuvkjU;urei l Ldj.kik l kfxdh d ek;/e l e?kky; d vkfnok l h lenk; eNkVieku d m ek dk l tu	MhchVh& ,ubv kj	ih- l j'kdekj oh- dekj d-,u- f'kok



	ifj;k t uk dk uke	fuf/k dk l kr	i/kku ,o lg& vUo"kd
17-	ikdfrdj'kdkfudkyu] j'kijvk/kkfjrmRiknk] toek=k dh fVfd;kcukurFkmi;kxh;kfxdk d fy, dy d vif'k"Vk d mi;kxgrMkmuLVheiLLdj.k	MhchVh& ,ubvkj	ih- Ij'kdekj d-,u- f'kok
18-	mÜkjioh {k= edykuk'kd tho l dyefofo/krk dh l Hkkoukvkdryk'kuk] t hukehrFkkVk l fØIVkeikQbfyxrFkkikni l fe;kdfedy	MhchVh& ,ubvkj	ch- ineukHku , l- cfd;kjuht- ijkuh
19-	dyeflxkVkd l Øe.k d fo#) ifrj{kk dh vkf.od0;k[;k & flxkVkd ifrjk/kh l dj d fodk l d fy, mÜkjio d E; l ktuun0; dk nkgu	MhchVh& ,ubvkj	vkj- rxoy
20-	¶;tfj;e e>kuifrjk/k d fy, mÜkjio l dy d tuun0; dh NVkvvkjfojk/kh thui: ik dk vkf.od y{k.k&o.ku	MhchVh& ,ubvkj	vkj- rxoy
21-	fo"kk.k dk ukfdxvkmV& l hvkjvkbih, l ihvkj& l h,, l9 i.kkyh l thukeliknu d ek;/e l dy d [krjukddyk /kkjhfo"kk.k d vuØek dk fu"dk l u	MhchVh& ,ubvkj	vkj- l Yojk tu l h- vujk/kk
22-	Hkkjr d mÜkjioh {k= edy d xfpNrpM fo"kk.k d ic/k d fy, vkj,u,vkb; fDr d ek;/e l toik kfxdhg l r{ki	MhchVh& ,ubvkj	vkj- l Yojk tu l h- vujk/kk

iv. fufonkvu l /kku ifj;k t uk,

- 1- dy d b;E; l hiÜkh /kCckjxdk l ekt d ju d fy, ikuk l vkjMkE;fyu d iÜkhijfNMdko d iHkko dk eY;kdu ¼Mk- vkj- rxoy½
- 2- dy dh okf.kfT;dfdLexkMu;u d iÜkh /kCckjxk d ic/k d fy, ijkfQfudry dk eY;kdu A

e l l j k t i V k L i f ' k f y V h t i k b o V f y f e V M j p U u b j r f e y u k M ¼ M k - v k j - r x o y ½

- 3- dyeb;E; l hiÜkh /kCckjxkmRiUudjuokyekbdk 'khjykb;E; l hjkxtud d Loik= fujk/k d fy, eVfMdky dk eY;kdu ¼Mk- vkj- rxoy½

vuc/k– II

ek l efoKkuhvkdM

ekg	lokPp rkieku (°C)	U;ure rkieku (°C)	lki{k vknrk (%)	o”kk (mm)
viy 2017	40.43	27.3	34	0
eb 2017	40.6	28.3	39.22	65
tu 2017	37.96	27.9	49.56	46.4
tykb 2017	39.4	29.2	47.2	45
vxLr 2017	36.76	27.5	54.56	174.1
fl rEcj 2017	34.2	25.6	58.5	261.2
vDrcj 2017	34.93	26.8	58.26	216.4
uoEcj 2017	30.96	24.2	65.26	93.2
fn lEcj 2017	31.06	23.3	65.9	31.5
tuojh 2018	30.45	21.6	50.16	0
Qjoj ^h 2018	32.75	22.5	44.64	8.4
ekp2018	35.77	22.4	41.54	0
dy				941.2



"kdvui-jk-d-vu-d- okf"kd ifronu 2017-18



हर कदम, हर डगर
किसानों का हमसफर
भारतीय कृषि अनुसंधान परिषद

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