



# ეპრესი

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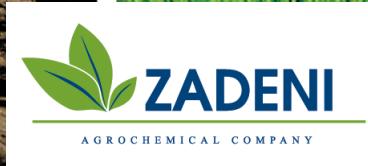
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ახალი მწვერვალი აგროქიმიკი!!!

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6



meTesl eoba saqarTvel oSi -  
real oba da perspektiva  
rogor xvdeba qveyana gazaf-  
xul s, ra gvaqvs, ra probl emebia  
meTesl eobis mxriv, ra unda ga-  
keTdes dargi s ganvi TarebisTvis?



13

sagazafxul o samuSaoebi  
saSemodgomo xorbl is naTeSi  
gaRivebi saTvis saWi roa oTxi  
faqtori: si Tbos, si naTI is, haera-  
ci i s da teni s erTobl ivi moqmiede-  
ba, romel Ta gavl eni T endospermSi  
arsebul i sakvebi el ementebi iSI e-  
ba, gadadi s xsnad mdgomareobaSi

31



pekinuri ixvi

i xvebi gamoirCevian mal mwifadobi T, sakvebi sadmi nakl ebi mom-Txovnel obi T da gamZI eobi T.

Jurnal i `axal i agrarul i saqarTvel o- gTavazobT!

Jurnal Si erTi kvadratul i santimetri sarekl amo farTiS  
Ri rebul eba Seadgens: ydi s meore gverdze \_ 60 TeTrs (mTI lani  
gverdi \_ 350 l ari), bol oswi na gverdze \_ 50 TeTrs (mTI lani  
gverdi \_ 300 l ari), bol o gverdze \_ ukana ydaze \_ 60 TeTrs  
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wl i dan. samecniero statil s mocl oba reziumis Tanxi ebi T ar  
unda aRematebodes 1,5 interval iT, 12-lani SriftiT nabeWd 5  
Tabaxis gverds.

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1 wl iT Jurnal i sgamowera dagi debaT 24 l ari, 6 Tvl T \_  
12 l ari.

4

aq ambavi atydeba,  
deda Svil s ar aiyvans!

11

marcvl eul kul turaTa  
warmoebaSi arsebul i  
mdgomareoba da  
ganvi Tarebis perspektivebi

12

bostneul i sa mindvris  
kul turebis xarisxiani  
produci i s warmoeba  
bunebrivi resursebis  
maqsimal uri gamoyenebi T

15

mandarins SeuZI ia  
gaxdomaSi dagexmaroT

16

wiTel i da Savi mocxari \_  
moyvanis agroteqnoI ogiuri  
Taviseburebebi

19

mul Cireba

22

Syngenta  
Agro services AG

24

sagarTvel os sasursaTo  
usafrTxoebi s koncefci a  
ganvi Tarebul i qveynebis  
gamocdil ebis safuZvel ze  
unda SemuSavdes

28

cxovel Ta saZovrul i  
Senaxvis perspektivebi  
sagarTvel oSi

30

kandis naWermi Sei ZI eba  
futkris oj axi ixsnas

32

qarTul i Zroxisj i Sebi



# aq ambavi atydeba, deda Svil s ar ai yvans!

saqar Tvel os sofi is meurneobis ministrma, davi T ki raval i Zem mi mdi nare wl is eqvs Teberval s Jurnal istebisTvis brifingl gamarTa da sami nistros muSaobi s 100 dRI ani periodi Seafasa.

rogorc saminstros mier gavr-cel ebil i oficial uri informaci idan Sevi tyveT, ministrma Jur-nal istebTan yvel a im mimdinare da samomavl o proeqtebze il apa-raka, rasac saqar Tvel os mTavro-ba dargi s Ci xi dan gamosayvanad ax-rociel ebs.

erT-erTi mTavari proeqti „mciremiwian fermerTa sagazafxul o samuSaoebis xel Sewyobis proeq-tia“, romel sac sofi isa da sofi is meurneobis ganviTarebis fondi daafinansebs.

„mciremiwiani fermerebisTvis, sxvadasxva tipis daxmarebis paketi-a SemuSavebul i. am etapze mTavroba 640 000-ze met gl exs, mcire meurnes daexmarea, visac sakuT-rebaSi 0-dan 5 heqtris CaTvl i T sasofl o-sameurneo daniSnul ebis miwis nakveTi aqvs. am kategoriis mciremiwiani fermerebi sasofl o-sameurneo baratebs maT sargebi-l obaSi arsebul i miwis farTobis kategoriis Sesabami sad mi i Reben.

mciremiwian fermerTa xel Se-wyobis programaze 180 ml n. l ari-zemeti dai xarj eba“.

sofi ismeurneobis ministrma isic ganmarta, konkretul i farTobis mi-wis mfl obel ebi, ra saxis sasofl o-sameurneo baratebs mi i Reben.

kerZod: vi sac 0.25 (2500 kv.m) heq-tari sasofl o-sameurneo daniSnu-

I ebis miwa aqvs, radgan aseT mcire farTobze teqni kismiyvana da gamo-yeneba rTul ia, 100 l arian sasofl o-sameurneo baratTs mi i Reben, ri Tac maT Sesabami si Ri rebul ebis sasofl o-sameurneo momsxurebis da produuciis SeZena SeeZI ebaT;

0.25 ha-dan 1.25 heqtar i sasofl o sameurneo miwis mfl obel ebi (ministris ganmartebeTi aseTi kategoriis mcire fermerebis – benefici-arebis raodenoba yvel aze metia), 510 l arian kombinirebul sasofl o-sameurneo baratTs mi i Reben.

erT heqtarze gasacemi kombini-rebul i sasofl o-sameurneo barati (erT heqtarze gadaangari Sebi T) i Tval i swinebs: niadagis moxvnas, gafxvierebas (dadi skva, dafarcxa-va) da 300 l aris Ri rebul ebis sa-suqebis, pesticidebis, sasofl o-sameurneo inventaris SeZenas.

fermerebi, roml ebsac 0.25-ha-dan 1.25 heqtarze venaxi, xexil i s baRi, Caispl antacia aansxvamraval wl iani nargaoba aqvs gaSenebul i, anal ogi-urad, erT heqtarze gadaangari Sebi T, 510 l aris Sesabami sasofl o-sameurneo baratTs mi i Reben.

1.25-ha-dan 5 heqtar amde saxnavi farTobis, an mxol od mraval wl iani nargaobi s mqone fermer ebs 640 l aris Ri rebul ebis nominal uri sasofl o-sameurneo barati gada-ecemaT.

mokl ed regi onebSi gamocox-eba iwyeba, Cveni gl exoba, rome-i ic aqamde aravis axsovda, mTavrobis daxmarebis mol odinSi imedi-anad xvdeba gazafxul s.

am proeqtis warmatebiT dawyeba da dasrul eba, rac adrec i Tqva, saqar Tvel oSi sasofl o-sameurneo miwebissamarTI i an registraciaze di dwil adaris damoki debul i. rogorc brifingze ministris gacxadebul i informaci idan irkveva, saqar Tvel oSi SarSan noembrande miwebis 80% registrirebui i ar yofil a, am i tom, sagazafxul o programis fargi ebSi, 2012 wl is noember-dekemberSi, karda-karis principiT, mTel i qveynis mas-tabiT, miwis mesakuTreTa aRwera ganxorciel da. Seqmni l a sainfor-macio baza, monacemTa meoradi gadamowmebac moxerxebul a da am informaciis saj aro reestrismo-nacemebTan Sedarebac.

noember-dekemberSi saqar Tve-l oSi dauregistriri rebel i miwebis 80%-is registraciaTu real urad moxerxda, kardakar, nakveT-nakveT aRi wera yovel i goj i dasax-navi miwa da dadginda mfl obel Ta-vinaoba, aferum saminstrosa da mis vajkacobas. or TveSi, Tanac zamTarSi, es, marTI ac titanuri Sromaa, magram regi onebi dan Cvenamde, sxva informaci ac ar-

wevs da, Rmer Tma qnas, vcdebodeT, Torem iq, regionebSi baraTebis darigebis dros ambavi atydeba, deda Svi l sar aiyyans!

**improqtebs Soris, roml is dawyebis Sesaxeb ministrabrikingze il aparaka, yvel aze sayuradRebo da mni Svnel ovani, vfiqrob, „SeRavaTiani agrokreditis proeqtia“.**

„mciremi wi anTa daxmarebis proeqti sgan“ gansxvavebi T, romel ic uvro social uri proeqtia da sofl is meurneobis ganvi Tarebas, vfiqrob, nakl ebad Seuwyobs xel s, „SeRavaTiani agrokreditis proeqtis“, rogorcki real urad dasamar-Ti lanad amoqmeddeba, amas Zal lan didi mni Svnel oba aqvs, saSual o da msxvll fermerebs, da sabol ood Cvens qveyanas Svebas mi scems.

saqar Tvel os sakredi to bazarze, sofl is meurneobis ministris gancxadebi T, sami saxis SeRavaTi-ani agrosakredi topoduqtigam-Cndeba.

● 5 000 l aramde uprocento (giraos uzrunvel yofis gareSe) sasaqonl o krediti mcire ferme-rebisTvis, ri Tac maT sezonis dasawyisSi SesaZI ebl oba miecemaT, banki dan uprocento sasaqonl o krediti (ganvadeba) ai Ron da igi sezonis (sawarmoo cikl is, mosav- I is aReba-dabi naveba) dasrul ebis Semdeg gadai xadon.

● 5 000-dan 100 000 l aramde, arametes 7-8%-i wl iuri ganakveTi SeRavaTiani krediti saSual o da didi ferme-rebis xel Sewyobasa da iafI krediti T uzrunvel yofas iTval i swinebs. aseTi sesxebi miecemaT, vi sac erT wel ze nakl ebi vadiT, 5000-dan 100000 l ari sabrunavi kapital is dasafinansebl ad sWirdeba. am tipis sesxebi mi i Reben saSual o da didi ferme-rebi, roml ebic mcire fermerTa xel Sewyobis programiT gaTva- l i swinebul baraTebi ar i Reben.

● 1 000 000 l aramde 3%-i saSua- l o wl iuri ganakveTi T, SeRavaTi-ani, grZel vadiani krediti sasof- l o-sameurneo sawarmoebisatvis.

sasofl o-sameurneo sawarmoebis dafinanseba, rogorc ministri gan-martavs, mosavl is aRebis Semdgom, nebl smieri saxis produqclaze da-matebiTi Rirebul ebis Semqmel i infrastrukturis (sasawyobe, dam-fasoebel i, samacivre meurneobebi

da gadamamuSavebel i sawarmoebl), aseve sxva tipi sawarmoo proeqtebis (Tanamedrove fermebi, sasaTbure meurneobebi da sxva) ganvi Tarebis xel Sewyobas iTval i swinebs.

am sqemi T gacemul i SeRavaTiani (saSual od 3%-iani) krediti T 2013 wel ss ofl is meurneobis pro- duqtebis gadamamuSavebel i 60-mde sawarmo gai xsneba.

**SeRavaTiani agrokreditis proeqtis 2013 wl is marti dan amoqmeddeba.**

sagazafxul o programis efek- turad ganxorciel ebis mizniT 2013 wl is ianvarSi dai wyo traq- torist-memanqaneTa gadamzadebis kursi, roml is fargl ebsi gadam- zaddeba da SemdgomSi 900 traq- torist-memanqane dasaqmdeba.

saxel mwifom wl eul s 350 mZime sasofl o-sameurneo teqnika, 1700 motobl oki da misabmel i aggregatebi Sei Zina, romel ic saqar Tvel oSi mal e Semova.

axal i strategiis Sesabami sad i qmneba sofl is meurneobis sa- ministros regionul i sainfor- macio-sakonsul taci o samsaxu- rebic. am samsaxuri Tvis specia- l istebi konkursis wesit irCeva. konkursi gamoxadebul ia da mar- tis dasawyisSiTvis saqar Tvel os masStabiT, 54 municipal i tetSi sa- konsul taci o samsaxuri Sei qmneba, sadac 250 special isti dasaqmdeba. maTi moval eoba gl exeba da fer- merebis daxmara, adgil zesaWi ro- konsul taci is gawevo i qneba. xuTi aseTi sainformacio-sakonsul taci o samsaxuri awaraSi c gai xsneba.

2013 wl is biuj etis mixedvi T, qveyanaSi irigaciisa da drenajis reabil itaciisaTvis gankutvnil i Tanxa 54 mil ioni l ariT gai zarda. 2012 wel si rigaciisa da drenajisTvis biuj eti T 10000000 l ari iyogan- sazzRvrul i, xol o 2013 wl isTvis es Tanxa 64400000 l aramde gai zarda.

amJamad marneul is, gardabanis, mcxeTis, sagarej os, qarel is, kas- pis rai onebSi erTdroul ad 10 ar- xis reabil itacia mimdinareobs. wl is bol omde mTel saqar Tvel o- Si 50 sarwyavi arxi gai wmindeba.

sofl is meurneobis ganvi Tare- bis saerTaSori so fondTan (IFAD) SemuSavebis procesSi a axal i, iri- gaciisa da drenajis proeqti, romel ic aseve 2013 wl is Semdgoma- ze dai wyeba. proeqtiis Rirebul eba

15 mil ion dol ars Seadgens. aseve msofl io bankTan SemuSavebis axal i proeqti, roml is mocol oba 50 mi- lion dol ars Seadgens. aRni Snul i Tanxebi irigaciisa da drenajis infrastrukturis aRdgenas mox- mardeba, proeqtiis ganxorciel eba 2013 wl is Semdgomaze dai wyeba.

evrokavSirTan TanamSroml obi T SemuSavebis da uaxl oes xanSi xel i moewereba sofl is meurneobis ganvi Tarebis axal proeqts. aRni Snul i proeqtiT saqar Tvel o sofl is meurneobis seqtoris gasavi Tarebl ad 40 mil ioni evros grants mi Rebs, saidanac, daaxl oebi T naxevari, sa- biuj etograntii qneba, xol o 15ml n evro sasofl o sameurneo kooperaciis ganvi Tarebas moxmardeba.



is rac sofl is meurneobis ganvi TarebisTvis keTdeba, misasal - mebel ia, magram aqve auci l ebl ad unda vTqva, regionebi dan wuxil s gamoTqamen, rom sofl is meurneobis saministros Cinovnikebi re- gionebSi, adgil obriv special istebiTan iseTi kontaqti ar aqvt, rom maTac daeki Txon ra teqnika, rogori teqnol ogiebi sWirdebaT da ra prioritetebz ea maT regi- onSi gasamaxvili ebel i yuradReba. rogorc aqamde, arc axl a, maT arav- in, arafers eki Txeba!

es ki, Tu mar TI ac asea, ver yofi- l a kargad saqme. ar mgonia regionebTan mwi drokavSiris gareSemarto saministrodan moxerxes sofl is meurneobis aRorZineba da immi znis mi Rweva, rasac dRevandel i mTavro- ba gvpi rdeba da sazogadoebi s di di umravl esoba ase mouTmenl ad el o- deba.

*SoTa maWaraSvili*



## meTesi eoba saqarTvel oSi - real oba da perspektiva

rogorc cnobil ia, saqarTvel o, arcTu Soreul warsul Si, marcvl eul i Tu sxva kul turebis saTesi e masal i T sakuTari moTxovnas, Ti Tqmisi mTI i anad i kmayofili ebda.

sagazafxul o samuSaoebi karzea momdgari, xari sxiani saTesi e masal is SeZena gl exisa Tu fermerebi sTvis Zal ze aqtualuri saki Txi a.

rogor xvdeba qveyana gazafxul s, ra gvaqvs, ra probl emebi a meTesi eobis mxriv, ra unda gakeTdes dargis ganvi Tarebi sTvis? am Temebze sasaubro d redaqci am gadawvi ta mrgval magi-dasTan mecniererebi moewvi a da maTTan erTad gaeanal i zebi na dargSi Seqmni l i vi Tareba.

modi T, erTad movusmi noT mecniererebs da daskvna Semdeg gamovi tanoT.

Mrgval magi dasTan di skusi aSi monawi l eoben:

petre nasyi daSvi l i, saqarTvel os sofi is meurneobis mecniererebaTa akademisi akademi kosi, saqarTvel os mecniererebaTa erovnul i akademi is w/korespondenti, saqarTvel os mecniererebis damsaxurebul i moRvawe, saxel mwifo da l . dekaprel eviCis saxel obis premi is l aureati, s/m doqtori, profesori:

kaxa l aSxi, Sps „I omTagoras“ direktori, sofi is meurneobis akademiuri doqtori; xorbl is sel eqcioneri;

zurab jinjixaZe, simindissel eqcioneri, sofi is meurneobis akademiuri doqtori;

gul nara CxutiaSvi l i, sofi is meurneobis akademiuri doqtori, xorbl is sel eqcioneri;

i rakti rexviaSvi l i, sofi is meurneobis akademiuri doqtori, xorbl is sel eqcioneri;

### **zurab jinjixaZe:**

– vidremTavar saTqmeli svityvi, cotaistorias gavixseneb.

saqarTvel oSi simindi 200-250

aTas ha-ze i Teseboda statisti-

ki mixedviT, ramdenime aTeul i

wel iwadia am kul turis saSual o

mosavl ianoba, ar matul obs. 15-20

wl is masal ebis mixedviT, es cif-

ri heqtarze 2,3 tonis fargl ebSi

meryeobs. msofi i oSi simindis sa-

Sual o mosavl ianoba 4,5 t. Sead-

gens, ganvi Tarebul i qveynebSi es

maCvenebel i gacil ebiT di dia.

dRes saqarTvel oSi simindi 121

aTas ha-ze i Teseba da, daaxl oe-

biT, 225 aTas tona marcvl s vi-

RebT. 1996-2001 wel ebSi, roca co-

tastabiluri vi Tarebaito, simindis

197 ha-ze i Teseboda da 417 000

tona marcvl s vawarmoebdi T. ga-

modis, rom amwl ebTan Sedarebi T,

dRes 194 000 toni Tnakl ebsiminds

giorgi Runi Svi l i, sofi is meurneobis ganvi Tarebis fondis marcvl eul is Ioj istikis komplis direktori;

avTandisl mumi aZe, sofi is meurneobis mecniererebaTa doqtori;

nato kakabaZe, sofi is meurneobis doqtori, bosteul -baRCeul i kul turebis nacionali koor-

dinatori saqarTvel oSi;

Ieri nozaZe, sofi is meurneobis mecniererebaTa doqtori;

nana fancxava, saqpatentismTavari special isti;

ana gul bani, Sps „agro qarTus“ saTesi e da sargavi masal is warmoebis samecniero-sawarmoo centris koordinatori.

j i Sis simindis ganvi damzadebul kerZebs, Romi, mWadi, fafa da sxva, i seTi gemo da Tvis sebebi aqvs, rac Semotani l j i Sebs, mi Tumetes hibriderbs ar gaaCniaT.

saqarTvel os mosaxl eoba 350 wl is ganmavil obaSi simindis, ge-



moTi da sxva sasargebi o Tvisebi T arCevda. swored amis Sedegia is, rom dRes amdeni unikal uri simindis j i Sebi gvaqs.

sasursaTo simindis 3000-4000 tona Tesl s mosaxl eoba TviTon amzadebs, rasac 100 000 ha-ze Te-savs da, daaxl oebiT, 191000 tona marcvil s i Rebs.

simindis didi nawil i CvenTanac safuraJed gamoi yeneba. safura-Jed, ZiriTadad, yviTel marcvil i-an si mindis moi xmaren, radgan i gi didi raodenobiT karotinoidebs, provitamins Seicav, rac cxove-lisa Tu frinvel is normal uri zrda-ganviTarebisTvis aucil ebel i komponentia. Tu sakvebSi i gi ar aris, maSin xel ovnurad amateben, magram gangebam yviTel si-mindis es Tviseba bunebrivad Ses-Zina.

safuraJe simindi dRes 100 heq-tarze iTeseba. aqamde, gamonakl i-sis garda, mTI ianad adgil obri-vi sel eqciuri j i Sebi i Teseboda: aboSuri yviTel i, „qarTul i kru-gi“ kaJa simindi, geguTis yviTel i da a.S. amis gar da di di muSaoba i yo gaCaRebul i sel eqciur warmoe-baze, ris Sedegadac qveyanaSi 11 safuraJe simindis hibidi Seiq-mna da daregistrinda. aqedan rva saqarTvel os miwaTmoqmedebis in-stitutSi Seiqmna da sami – „firma I omTagoras“ meurneobaSi. 11-ve hibidi saqarTvel os mesiminde-obis eqvise agrokl imatur zonas moi cavs.

i misaTvis rom qveyanaSi simindi 100 aTas heqtarze daiTesos, 2000 tona Tesl ia saWiRo. erTi Sexed-viT dRes es arareal uri ci frad gveCveneba, magram 80-ian wl ebSi TviTon vmonawil eobdi Tesl is damzadebis procesSi da vici, mi-waTmoqmedebis institutsa da mas-Tan arsebul sawarmoo gaerTiane-ba „TavTavSi“ 1200 tona simindis martivi hibidis Tesl i rogor mzaddeboda. mTI ianad ki warmoe-bul i Tesl is mocol oba 2100 to-nas aWarbebda.

saqarTvel oSi es sakiTxi, Teoriul ad ki ara, praqtikul ad iyo gadaWri i. dRes ki yvel aferi ganadgurebul ia, miwaTmoqmedebis instituti, gauqmebul i da miwasTan gasworebul ia. moqmedi

special istebi, mecnierebi j i Se-bisa da hibridis avtorebi, vi sac ki dev SeuZI ia muSaoba, saxl Si gauSves. erTaderTi, me var dar-Cenil i, magram j er mizezi ver-gavarkvie, ratom damtoves, ras el odebian.

amitom hibridul i Tesl is war-moeba qveyanaSi, TiTqmis, gaCere-bul ia. erTaderTi organizacia, romel i c am saqmes misdevs, firma „I omTagoraa“.

am firimis direqtors, batonma kaxa l aSxs, romar Semoekri ba mecnierebi, TviTon ar Cadgomoda am saqmes saTaveSi, xorbl isa da si-mindis sel eqcia qveyanaSi mTI a-nad Cakvdeboda.

firma „I omTagoraSi“ xorbl is 3 j i Si da simindis 5 hibridia gamoyvanili i. maT miRebul i aqvT serTifikati da patenti. gamoyvanil i gvaqs sasursaTe hibridebic. saxel mwifor rom xel s gviwyobdes, mokl e vadaSi, pirvel etapze 300 tonamde simindis uxvmosavl iani Tesl is warmoebas SevZI ebdiT, magram, rgorc vxedav, maincdama-inc di d interess arc axal i mTav-roba iCens, arada qveyanaSi Tesl is mwarmoebel i sxva organiza-cia aRar arsebobs.

meTesl eobis dargi rom aRor-Zindes, unda aRdges is organiza-ciebi, roml ebic meTesl eobiT i y-vnen dakavebul i. miwaTmoqmedebis instituti, Sesabamisi yuradRe-bis da daxmarebis SemTxevaSi, 2-3 wel i wadSi 400-500 tona pirvel i Taobis Tesl is warmoebas SeZI ebs, rac mil ionobiTl ars udris, magram vi Racis ugunuri gadawyvet-i-ebiT, qveyanas es saSual eba dRes mospobil i aqvs da Tesl is SesZenad qveyana ful s iqi T xarj avs. ras yidul obs, es ki dev ufro mZi-me Temaa.

#### Kaxa l aSxi:

– mecnierebam, maT Soris genur-ma inJineriam Tavisi resursi amo-wura, bunebis kanonebs versad gaeqcevi. msofl ioSi dRes mil iard naxevari adamiani SimSil obs. dedamiwaze yovel wl iurad 7 mil i-oni heqtari savargul i eroziis, daWaobebis Tu sxva mizezTa gamo-nadgurdeba. Cvennair qveynebs, vi-sac j er ki dev raRac resursi Se-

mogvrca, didi perspektiva aqvs, rasac yvel a aRni Snavs. qveyanam Tavi rom gamokvebos da produqtis SesazZenad sazRvargareT mil i-ardi dol ari ar gai tanos, es xom real uri saqmea da didi ambavi ar swi rdeba.

ramdenime wl is winaT saxel mwifom CvenTan TanamSroml obis survili i gamoTqva, magram bol os Cveni masStabi ar moewonaT. samwuxarod, qveyanaSi erTaderTi kom-pania varT, vinc xorbl isa da si-mindis Tesl s amzadebs, sel eqcias eweva. bol os i se wavida saqme, ga-farToebis nacvl ad, Tavi rom ga-dagverCina, warmoebis Semcireba mogvi xda. saxel mwifof manqanasTan ras gavxdebodi T. Cven yuradReba



ar mogvaqci es, wavidnen, mil i on-nebi gadai xades, xorbl is da si-mindis Tesl is ucxoetidan Semo-itanes. i se simarTI e iTqvas, „pi-onerma“ Cveni saqme gaakeTa, rom mosaxl eobaSi hibridis gacnobas Seuwo xel i. hibridebis gareSe ki simindis marcvil eul is warmoebis gazrda SeuZI ebel ia.

mogexsenebaT, mecniereba Zvi-ri saqmea. gaTvl il i gvaqs, Cveni Sesazl ebl oebiT, am tempiT gan-viTarebas Tu gavagrZel ebT, aTi wl is Semdeg, raRac Sedegs miVar-wevT, magram Tu saxel mwifof dain-teresdeba, or-sam wel i wadSi karg masStabebze gasvl a SegvZI ia. rac mTavaria, sakmaoze meti gene-tikuri resursi gvaqs, rom axal i sel eqcia vawarmooT, j i Sebi ga-moviyanoT da davxvewoT. dRemde mecnierebi, faqtobri vad, enTu-ziazmis xarj ze, muSaobdnen, sam-wuxarod Sesabamis anazRaurebas

axl ac ver vaZI evT, magram vnuSa-  
obT.

Cvens mecnier ebs „I omTagoras“ meurenobi bazaze Tavisi samecni-  
ero firma aqvT, „agrosamecnero  
j gufi I omTagora“. gvaqvs Cveni  
sanerge, sacdel i nakveTebi, sadac  
Cveni xorbl ebis aborigenul j i-  
Sebs vinaxavT da vamravl ebT.

xorbl is sel eqciaSic kargi Se-  
degebi gvaqvs, ramdenime uxvmo-  
savl ianj iSebi gvaqvs gamoyvanil i  
da registrireb ul i.

dRes, rogorc cnobil ia, imar-  
j vebs araZI ieri mcenare, aramed  
is, romel ic garemos egueba. rac  
ufro binZurdeba garemo, miT  
ufro ZI ierdeba safrTxe. gansakuTrebit di di probl ema SeiZI e-  
ba dadges virusebis gavrcel ebis  
mxriv. amis real uri safrTxe ar-  
sebobs. ager axl axans ra daemar-  
Ta irans, viciT, moweul i xor-  
bli is mosavl is 95% erTianad gau-  
nadgurda. amitom, am probl emas  
rom momzadebul i davxvdeT, Cven  
TviTon daviwyeT iseTi forme-  
bis Zebna, romel ic Cvens garemos  
ufro egueba. swored aseTi ge-  
netikuri masal iTaa ZI ieri Cve-  
ni xorbl is j iSebi. Cven viRebt  
el itur Tesl sac da vawarmoebT  
pirvel reproduqciasac, rasac  
fermrebs vTavazobT. saer Tod  
msofl ioSi ara Tu el itas, pir-  
vel i reproduqciis Tesl sac ar-  
vinyidis, amitom vambobT, romsi-  
mindis da xorbl is uxmosavl iani  
Tesl is warmoebis kargi pirobebi  
gvaqvs da qveynis mniSvnel ovani  
moTxovnil ebis dakmayofil eba  
SegiZI ia, Tumca aseTi interes-  
j er Cvens mimarT saministros ar  
gamouCenia.

Cvens Sexvedras eswreba erT-er-  
Ti msxvli i fermeri, kaxa qurdiani,  
roml sac 1000 ha-ze aqvs da-  
Tesli i Cveni xorbal i, pirvel i  
reproduqciis Tesl i da sakmaod  
di dmosaval s, 5000 tonamarcvl is  
miRebas el odeb a.

#### gul nar CxutiaSvi II:

– ra mdgomareobaa xorbl is me-  
Tesl eobis mxriv qveyanaSi? am  
ki Txvaze pasuxi mokl e da marti-  
via: – dargi aRar arsebobs!

iyo dro, roca regionisaTvis  
Sesabamisi xorbl is j iSebi irCe-

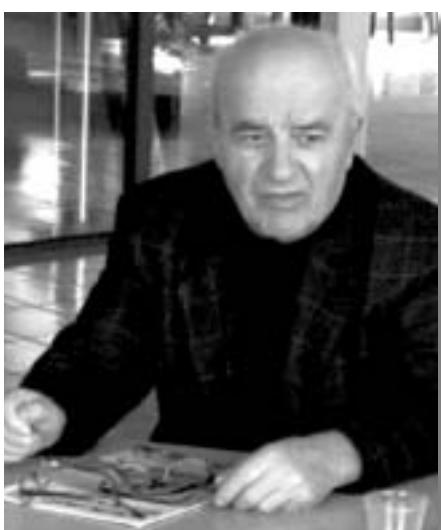


oda, radgan erTi j iSi agropiro-  
bebi sa da sxami zeZTa gamo ar SeiZI  
eba yvel a regionisTvis misaRebi  
iyos, amitomac miRebul i j iSebi  
gamocdas da darai onebas da mis  
sworad gavrcel ebas didi mniSv-  
nel oba aqvs.

meTesl eoba ori safexurisgan  
Sedgeba, pirvel adi meTesl eoba,  
anu el ituri Tesl is miReba da  
misgan reproduqciul i Tesl ebis  
warmoeba. Tu ar iarsebebs el ituri  
Tesl is warmoeba, ar iqneba  
reproduqciul i Tesl ebi. qvey-  
anaSi es saqme Camkvadaria da mis  
aRdgenaze mTavrobam unda ifiq-  
ros, erTi romel im epirovneba.  
Tu kompania, am probl emas ver ga-  
daWris.

#### petre nasyi daSvi II:

– Tu ar aRvadgineT j iSTA ga-  
mocda, saqarTvel oSi sofl is  
meurneobis aRdgenaze I aparaki-  
zedmetia. es sofl is meurneobis  
safuzvel ia.



Cven yovel Tvis Semogqonda  
da arasdro Segviwyvetia ucxo-  
eTidan kargi j iSebis Semotana,  
Semogqonda simindis, xorbl is,  
I obios, bostneul i kul turebis  
Tesl ebic, magram Semotanil i j i-  
Sebi yovel Tvis gadi odaj iSTA ga-  
mocdas.

xorbal ze 6 sagamocdo daskva-  
na iwereboda, sadac asaxul i iyo  
misi gasavrcel ebel i kl imaturi  
da niadaguri pirobebi, sxva mon-  
acemebi, aseve iyo bostneul i-  
Tan da mraval wl ian nargavebTan  
dakavSi rebiT. vazs oTx zonaSi  
vcdidiT. xexil s – 6 zonaSi. dRes  
j iSTA gamocda aRar arsebobs,  
meTesl eobis mxriv, Tu ar CavTv-  
l i T „I omTagoras“, arsad aRara-  
feri xdeba.

arCTu didi xnis winaT saqar-  
Tvel oSi xorbl is j iSi, „j age-  
ri“ Semoitanes, romel ic manamde  
I omTagoras meurneobaSi icde-  
boda. „j age ri“ Zvirfasi j iSia, ma-  
Ral xarisxian produqciis iZI eva,  
magrammi potenciuri mosavl ia-  
noba heqtarze 5-6 tonas ar scil-  
deba. ai, Cven ki gvaqvs qarTul i  
j iSi – „I omTagora 123“, roml is  
genuri Sedgenil oba iseTia, rom  
Tu pirobebs Seuqmni, ha-ze 8-10  
tona marcvil s mogcems. qveyanas  
Tu sworad gaTvl il i programa  
eqneba, Tavisufl ad SeuZI ia mar-  
cvil eul i TsakuTari moTxovnil e-  
ba daikmayofil os. es mar to si ty-  
vebi ki ara, real obaa.

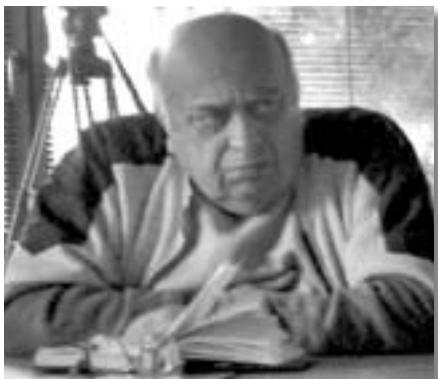
iyo dro, roca Cven simindi ar  
Semogqonda, sakmaris raodenobas  
TviTon vawarmoebdiT. saqar-  
Tvel oSi es cnobil i kul turaada  
sakuTari msofl io rekordsmeni  
j iSebi gvaqvs: „aj ameTis TeTri“,  
„abaSi yvi Tel i“, „geguTis yvi Te-  
li i“, „kaJovanebi“ da sxva. am j iSebi  
is meSveobi T mar to Cven moTxov-  
nas ki ara, mTel Crdil okavkias  
vakmayofil ebdit. Cveni j iSebi  
Sua aziis respublikaSic ki iTes-  
seboda. taSkentis ol qSi am j i-  
Sebidan heqtarze 1200 centneri  
marcvil i miiRes, amitom saTesl e  
masal aze saqarTvel oSi yovel T-  
vis rigi idga.

amis aRdgena SeiZI eba. RvTis  
madl iTj er kidev ar is xal xi, vi-  
sac SeuZI iamuSaoba da es unda Se-  
vunarcunoT momaval Taobebs.

## ra mdgomareobaa mebostneobaSi...

### I eri nozaZe

– 1990 wl ebamde saqarTvel oSi bostneul i moTxovnI ebis mixed-viT 28-29 aTas heqtarze i Teseboda. SarSanwin nivris deficiti iyo da kil ogrami 12 l aricki Rinda. aseTi CavarDNA daugegmaVi muSaobis Sedegia. zogadad saqarTvel oSi 900 000 tonamde bostneul i iwarmoeboda. muSaobda gadammuSavebel i qarxnebi, rogorc dasavl eTSi, ise aRmosavl eT saqarTvel oSi, magram maTgan dRes arcerTi aRarc funzionirebs. arsebobs erTi qarxana marneul Si, magram aq adgil obri- vi nedl eul i 5-10%-ze meti Sedis, mTI ianad nedl eul ze muSaobs,



radgan adgil obrivTan Sedarebi T, importirebul i iafij deba.

qveyanas yovel wl iurad 2500 kg. pomidvris da amdeni ve kombostos da 3000 kg. xaxvis Tesl i swirdeba. iyo dro, roca am raodenobis Tesl i qveyanaSi iwarmoeboda, axl a ki mebostneobaSi meTesl eobis saqme mTI ianad moSl il ia, sacdel i nakveTebi aRar arsebobs. dResac ki qveyanaSi 75 saxeobis bostneul i iTeseba, e.i 75 nakveTi maincaa saWiro, am saxeobebis Tesl i rom awarmoo.

bevri j iSi da saxeoba ukve da-kargul ia. xaxvis ramdenime j iSi gvqonda: kaxuri, qarTul i Tu sxva uamravi, dRes aRarcert i aRar arsebobs, asevea pomidoric. mog-vyavda „Woportul a“, sakonservo pami dvrebi, ar vici Tu kidev sad-meia SemorCenil i. qal batoni na-na kakabaZe ki muSaobs pomidvris sel eqciaze, magram sad waiRos es Tesl i? swirdeba vinmes?

amitom sofi is meurneobis sa-ministros dRes didi moval eoba

akisria, rom am dargSi saqme gamoswordes. meTesl eobis Sesaxeb kanoni a mi saRebi. unda aRdges j iSTa gamocda, sacdel i sadgu-rebi, Tu Cvens niadagur pi robebs Seguebul i j iSebi ar aRvadgi neT, arafeli gamova. sanam ki dev arian SemorCenil i special istebi, maTi gamocdil eba unda gamovi yenoT, daviwyot sel eqcia, aRvadgi noT pirvel adi meTesl eoba.

ki batono, metyvian ucxoeTi-dan rogor Tesl sac gindaT, Semo-vitanTo, magram Tu is am ganeds, Cvens kl imatze ar aris Seguebul i, pirvel wel s SeiZI eba raRac Sedegi mogces, magram mere auci-l ebl ad Cavardeba.

bostneul is Tesl i Cven unda va-warmoot, radgan Semotani l i Tesl i Zal ian Zviria, kil ogrami 500-550 l ari Rirs, kartofil is erTi kil ogrami el ituri Tesl i 2,5 l ari. erTi heqtaris dasaTesaD 7000 l ari Rirebul ebis Tesl ia saWi-ro. Cvens fermers aseTi Tesl is yidvis saSual eba sad aqvs? amitom adgil obriv warmoebas unda Seeq-mnas pi robebi. samecniero poten-cial s amoqmedebis SesaZI ebl oba mieces, es iqneba swori gadawyeti-l eba da dRevandel iviT aRardagvirdeba Tavis mtvreve, sad viyidoT sasurvel i kul turis xari-sxiani Tesl i.

### nato kakabaZe:

– mi waTmoqmedebis institutSi Semotani l i Tesl i vidre gamocdis yvel a safexurs ar gaivl ida da daskvna ar daiwereboda, ise vin gaavrceI ebda meurneobebSi. dRes mi waTmoqmedebis instituti, faqturad aRar arsebobs, iqara-nairi samuSaoebi ar tardeba. mebostneobis dargis special isti institutSi aRar darCa, kaTedra gauqmda, ganyofil ebebi daixura, momaval i special istebi sad unda aRizar don, vin unda aswal os, ga-urkvevel ia.

me mwidrod vTanaMroI ob mebostneobis saerTaSori so organizaciasTan, roml is saTavo ofisi taiwanSia. saukeTeso saTeso e masal as gvgzaviani, romel ic Cven kl imatur pi robebs i cdeba. ukve xuTi, CvenTan gavrcel ebul ic da aratradiciul ic j iSebic, gvaqvs



daregistrirebul i, magal iTad: sabostne soio, sabostne barda da sxva, magram es zRvaSi wveTia. Ca-Tval eT rom qveyanaSi es sfero, da-xurul ia.

### nana fancxava:

– sagangaSo faqtia, rom dRes axal gazrdoba am saqmiT ar interesdeba, qveyanaSi special isti aRar izerdeba. agrarul seqtor-Si ganaTI ebis sistema moSl il ia. mebostneobaSi special isti aRar datoves. RmerTma di dxans gvi-cocxl os batoni petre nasyidas-vil i, yvel a Tqvengani, magram mere ra iqneba, amaze unda dafiqrdes saxel wi fo, Cveni sazogadoeba.

me saqpatents warmovadgen da CvenTan axl i j iSebis daregistrireba kanoni T regul irdeba. j iSi unda gamoi cados gansxavebul obaze, er Tgvar ovnebaze, stabil u-robaze.

sagangaSoa is, rom Zal ian bevri Tesl i ukontrol od Semodis qveyanaSi. faqtobrivid, rac CvenTan daregistrirebul i ar aris da ise



Semodis, kontrabanda. es ki did safrTxes Seicavs, radgan ar vi-

ciT, rasvTesavT. es yovl ad dauS-  
vebel ia. aseTi ramara Tu civil i-  
zebul, aracivil izebul qveyneb-  
Si car xdeba.

bol o wl ebSi saqpatentSi „I om-  
Tagoras“ ramdenime j iSia dare-  
gistrirebul i, gvaqvs kidev sxa-  
dasxva saxeobi s bostneul is j iSi,  
romel ic ukve konkretul pirTa  
sakuTrebaa da kanoniT dacul ia.  
axal i Tu Zvel i j iSebis dareg-  
istrireba imitomaca a sawiro, rom  
Semdeg masze pretenzia aravis ga-  
uñdes.

### giorgi RuRuni Svi II

mixaria, rom aq gul anTebul  
qarTvel ebs vxedav, roml ebi c di d  
saqmes arian SeWi debul i. am saqme-  
Si axal i adamiani var, magram ukve  
Semi yvarda. daaxl oebl vici, ra  
mdgomareobacaa dargSi. pirve-  
l i nabij s vdgamT, kanonmdebl ob-  
bas vxewiT. eqspertebad ayvanil i  
gvyavs mecnierobi baton petre  
nasyidaSvi I is xel mZRVanel obiT  
da intensiurad vixil avT am sa-  
ki Txebs.

paral el urad vmuSaobT 19 sac-  
del i meurneobis aRsadgenad, sa-



dac j iSTA gamocda moxdeba. in-  
tensiurad muSavdeba dargis gan-  
vi Tarebis saxel mwifo programa.  
sofI is meurneoba da mecniereba  
ganuyofel i nawil ebia. vxedavT,  
rom didi probi emebis winaSe  
vdgavarT, bevri winaRoba gvxvde-  
ba, magram, merwmuneT, yvel a bari-  
ers davZI evT.

baton petresTan erTad sofel  
maRaroSi 600 ha-ze xorbl is 12  
j iSi davTeseT. kaxeTSi, sadac mi-  
waTmoqmedebis instituts sacde-  
l i sadgurebi hqonda, aq gvinndoda

meTesl eobis infrastrukturis  
aRdgena da teritoriis SeZena,  
mecnierebis mowveva, axal gazrda  
special istTa Taobis aRzarda,  
magram moxda ise, rom es mi wa Cven  
ar mogysi des da naCqarevad irane-  
l ebs imi s naxevar fasad misces, ra  
fasSi c Cven gvTavazobden.

saqme i se martivadaris, rogorc  
garedan Cans. es mart o sofI is me-  
urneobis saministros probl ema-  
ar gaxl avT, gl obal uri probl e-  
maa.

gmadl obT, dRes Zal i an sainte-  
reso Sexvedra gamovi da. kargi iq-  
neba Tu aseTi Sexvedrebi da dis-  
kusiebi mxol od SexvedrisTvis  
ar gakeTdeba. Cemi survil i iqneba,  
gakeTdes reziume, momzaddes wi-  
n nadadebebi, Sei qmnas muSa j gufi,  
romel ic paral el urad rekomen-  
daciebs gagviwevs da dagvexmare-  
ba. Cvenc yovel dRiurad mogawdiT  
informaciebs ras vaseTebT,  
ra etapze varT, kanonmdebl obis  
Tu sxva saki Txebis SemuSavebis  
mxriv. Tqveni daxmarebiT, imedi  
gvaqvs, mi vxedoT sel eqcias, j iS-  
Ta gamocdas. aucil ebl ad unda  
aRvadgi noT da ganvavi Tarot is,  
rac gvqonda. Sei ZI eba im masSta-  
bebiT vera, rac iyo, magram unda  
daviwoT Seneba.

dRes gvaqvs i ideal uri Sansi. i se-  
Ti resursi, rac Cvens sofI is me-  
urneobas, al bat, arc arasdrobs  
hqonia amxel a dafinanseba da ase-  
Ti yuradReba. qveynis momaval i  
mij awvul ia sofI is meurneoba-  
ze. iqmneba saxel mwifo programa.  
vfigrob, dotaciaze unda iyo  
yvel a issfero, romel ic sofI is  
meurneobis ganvi TarebisTvisaa  
aucil ebel i. es aris Cveni mi zani  
da am mimarTul ebiT vmuSaobT ki-  
dec.

saxel mwifos midgoma aseTia,  
rom j iSTA gamocdis garda, igi  
minimaluri doziT unda Caerios  
konkretul saqmeSi, fermerma Ta-  
vis saqme unda akeTos, moiyanos  
mosaval i, Semoitanos sasofI os-  
sameurneo teqni ka da ase Semdeg.  
yvel aferi rac dRes saxel mwifo  
sakuTrebaSia, ramdenime we-  
li iwadSi kerzo sakuTrebaSi unda  
gadavides. saxel mwifo CaerTveba  
im programmebSi, romel ic mecnier-  
ebis ganvi Tarebas exeba: j iSTA

gamocdas, special istebis momza-  
debas, sakonsul tacio centrebis  
aRdgenas da a.s.

sofI is meurneobis ganvi Tare-  
bisTa vis qveyanaSi didi proeqte-  
bi mzaddeba, rac yvel a dargs mo-  
icavas.

### avTandil mumI aZe:

mi waTmoqmedebis instituts 65  
j iSi da hibridi aqvs gamoyvani-



I i. qarTvel i mecnierebis amdeni  
wl i naSromi, ratom unda daekar-  
gos qveyanas, ver gamigia.

Cven varT special istebi, Ti To-  
eul s SeuZI ia Tavis saqmisi keTeba,  
magram vin unda gauwi os am saqmes  
koordinacia, mgoni mTavari es  
aris. mi vi divart mTavrobamde, da  
sxaTaSoris me Zal ian imedianad  
var, xandaxan sofI is meurneobis  
saministroSi misvl a mi xdeba, vx-  
edav axal gazrdobas saqmisi keTebis  
survili gauCnda, rac Zal i an maxa-  
rebs.

gul istkivil iT vambob: ase rom  
gagrZel ebul iyo, ramdenime we-  
li iwadSi saer Tod dawkargavdiT  
yvel afers, amitom vTxov saminis-  
tros warmomadgenel s, rom RvTis  
madl iT, saqar Tvel oSi j er kidev  
arian mecnierobi, romel Tac saq-  
mis keTeba aramc Tu SeuZI iat,  
survili aqvT, Tanac sxvasTan Se-  
darebiT arc did moTxovnebs ar-  
vis uyeneben, gamoi yeneT es xal xi!

### giorgi RuRuni Svi II:

Cven, rogorc vTqvi, mzad varT  
mogismi noT da Tqveni mosazreba  
gaviziatoT. j iSTA gamocdisa da  
sacdel i sadgurebis aRdgenasi  
Tqveni daxmarebiisa da Tanadgomis  
i medi gvaqvs.

# marcvl eul kul turaTa warmoebaSi arsebul i mdgomareoba da ganvi Tarebis perspektivebi

msofl lo eqspertTa anal itikuri monacemebis safuzvel ze dadasturebul ia, rom XXI saukunes kacobri oba metad gamwvavebul i sasursaTo probl emi T Sexva. Tu axal i saukuni s damdeglisaTvis dedami wazemosaxi eobis 17% SimSII obda, uaxl oes 10-15 wel IwadSi es safrTxepi anetis mxovrebTa 25%-s emuqreba, ami tom sasursaTo uzrunvel yofis Ziri Tadi probl ema i yo da maval Si caseTad darCeba, marcvl eul is warmoebis moclubl s gazzra da. am saki Txis warmatebi T gadawveta nebis mieri qveyni serovnul i ekonomiki s ganvi Tarebis safuzvel Ta safuzvel ia.

kul turul mcenareTa Sori s Cveni qveyni saTvis yvelaze mnis Vnel ovani a marcvl eul i kul turebi, romeli ic kul turaTa or j gufs aer Tianebs: 1) TavTavi ani pureul i (xorbal i, qeri, Wvavi, Svrja) da burRul euLi (simindi, Romi, fetvi, wiwi bura), 2) samarcvl e par-kosnebi (lobio, soia,) da zeTovani (mzesumzira).

samwuxarod, saqarTvel oSi Ziri Tadi marcvl eul i kul turebis mosavl ianobaZal i andabal ia. 2010wl is monacemebi T xorbal i 47,5 aTas ha-ze dai Tesa, sai danac saSual o mosavl ianobam ha-ze 1,0 tona Seadgina; simindi 99,8 aTas ha-ze dai Tesa da saSual o mosavl ianoba ha-ze 1,4 t. iyo; qeri dai Tesa – 20,6 aTas ha-ze, mosavl ianoba 1,1 t/ha; lobio dai Tesa 6,7 aTas ha-ze, mosavl ianoba – 0,6 t/ha.

mi zezi imisa, rommarcvl eul i kul turebis mosavl ianoba dabal ia, isaris, romugul vebel yofil i a sel eqcia-meTesl eobis sistema, ris gamoc ar arsebobs dRes Tesl is warmoebis sakanonmdebl o baza; ar midinareobskul turaTa morigeoba – Tesl brunva; ar arsebobs marcvl eul kul turebz orientirebul i mcenareTa dacvis integrirebul i sistema; dabal ia fernerTa kooperaci is done; gaumarTaviagrZel vadiani da afi sakredito sistema; saqarTvel os maval ferovani ni adaguri da kl imaturi zonebi saTvis (22 zona) ar tardeba Sesaferisi j iSebi sa da hibridebis SerCeva; warmoebaSi i Teseba winaswar Seumowmebel i j iSebi sa da hibridebis Tesl i; sasofl o-sameurneo teqni kisa da sawavis siZviris gamo droul ad da xarisxianad ver tardeba agroteqnol ogiuri Ronisziebebi (nidagis Ziri Tadi damuSaveba, Tesvi swi na damuSaveba, Tesva, kul tivacia, naTesi s movl a, mosavl is aReba – dabinaveba, Senaxva).

saqarTvel oSi obieqturi mi zezebis (mcire miwianoba, maRal mTianoba) gamo sakuTari warmoebis marcvl eul iT, ara Tu optimal uri, aramed minimal uri moTxovni lebis dakmayofil ebac, Ti Tqmis, SeuZI ebel i a. magram es ar ni Snavs, rom qveyanaSi dRes ar i yos marcvl eul is warmoebis Semdgomi mkveTri gazzrdisa da sasursaTo sakmarisi marcvl eul is miRebis realuri SesaZI ebl obani. sasofl o-sameurneo danis Snu-ebis miwebis prognosi mWidrodaa damoki debul i axali i miwebis aTvisebis mosal odnel i transformaciis, mel i oraciul damiwebis dacvis sxva Ronisziebebi.

kul turisaTvis Sesaferisi agroteqnol ogiuri Ronisziebebis gatarebi T, maRal xarisxovani reproduqciul i Tesl iT, saukeTeso bunebrivi, materialuri, SromiTi, intel eqtualuri da geopolitikuri potential is real urad amoqmedebi T da efektianobis amar-

Iebis gzi T, saqarTvel os SeuZI ia Rirseul i adgil i dai mki dros msopl ios integraciul procesebSi.

Cvens qveyanas sami Ziri Tadi piroba da ZI ieri mxare aqvs, rom sagrznobl ad gai zardos marcvl eul i kul turebis mosavl ianoba. es gaxl avT: 1) marcvl eul i kul turebis moyvanisaTvis xel sayrel i niadaguri da kl imaturi pirobebi; 2) mecnierebis mier gamoyvanil i da warmoebaSi danergil i marcvl eul i kul turebis j iSebi da hibridebi, romi ebic gamoirCeva, rogorc mosavl ianobi T, aseve mosavl is xarisxi T; 3) zonis pirobebisatvis, mecnierebis mier damuSavebul i marcvl eul i kul turebis movl a-moyvanis teqno logiebi.

Tu gvinda, gvqondes marcvl eul i kul turebis, qveyni saTvis saWi roj i Siani Tesl i, unda aRdges seI eqcia-meTesl eobis sistema xutive safexuri T: 1) sel eqcia (axal i j iSebi sa da hibridebis mi Reba); 2) j iSTa gamocda da darai oneba, 3) meTesl eoba, 4) Tesl i is warmoeba da damzadeba, 5) Tesl i kontrol i.

kul turebis maRal i da stabiluri mosavl is misaRebad saWi roa maTi movl a-moyvanis Tanamedrove srul -yofil i agroteqnol ogia, ri Tac SesaZI ebel i gaxdeba qveyanaSi vawarmooT: xorbal i -3,5 t/ha; qeri – 2,5 t/ha; simindi - 5,5 t/ha; wiwi bura - 2,2 t/ha; mzesumzira - 2,5 t/ha; lobio - 2,0 t/ha; soia - 2,5 t/ha. ami T saqarTvel o, dasaxeli ebul i kul turebis saSual o mosavl ianobis doni T miumaxl ovdeba evropis qveynebis saSual o mosavl ianobis dones da am kul turebis Sesabamisi odenobis saTesl e farTobebze Tesvi T mar to saqarTvel os sasursaTo da saTesl emasal iTuzrunvel yofaki ara, zogierTi kul turis marcvl is Tesl i, an damzadebul i produqtibis qveyni fargl ebs gareT gatanac SegveZI eba.

*petre nasyi daSvi i  
saqarTvel os sofl is meurneobis mecnierebaTa  
akademisi akademikoSi, saqarTvel os mecnierebaTa  
erovnul i akademisi w/korespondenti, saqarTvel os  
mechnierebis darsaxurebul i moRvave, saxel mwifo da  
1. dekaprel eviCissaxel obis premi is aureati,  
s/m doqtori, profesori;*

*oTar i ipartel iani  
saqarTvel os sofl is meurneobis mecnierebaTa  
akademisi w/kirespondenti, saxel mwifo da dargobrivi premi is aureati, s/m doqtori, profesori;*

*gul nari CxutiaSvi i  
saqarTvel os agrarul i universiteti s mTmognedebis  
Institutis mecnier muSaki, s/m akademuri doqtori.*

# bostneul isa da mindvriskul turebis xarisxiani produqciis warmoeba bunebrivi resursebis maqsimaluri gamoyenebi T

oTxmociani wl ebidan, saxnav-saTesi mi webis dacvas da nayofierebis amarI ebas qveyanaSi aranai ri yuradReba aRar eqceva, maSin roca savarguli ebris 49% qarisa da wyl i smier erozias gani cdls. gasaTval i swinebel ia isic, rom aRmosavl eT saqarTvel oSi 25wl is ganmavI obaSi ni adagiSi humusis Semcvel oba 0,8-1,5 %-iT Semci rda, rac katastrofis tol fasla, radgan humusis 0,5%-is momatebas bunebrivpi robebsi saukunec ar hyofnis.

aRar arsebobs organul i sasugebis gamoyeneba. ugul vebel yofi- l i a Tesl brunvebi da sideracia, ganoyiereba warmoebs mxol od mineral uri sasugebis maRal i dozebis cal mxrivi da usistemo gamoyenebi T. ni adagiis gasanoyierebl ad Ti Tqmis yvel a mxol od azotian sasuqs iyenebs, rac iwevs didi raoenobi T produqciaSi ni tratebis dagrovebas, romel ic kuWawil avSi uro sawaml avni tritebad gadaiqceva. amasTanave mineral uri sasugebis maRal i dozebis gamoyenebi T produqciaSi grovdeba mZime l iTonebi (dari Sxani, kadmi umi, tyvia da sxva) yovel i ve es iwevs adamiani s organizmSi organoebis SeSupera basa da simsvnis Camoyal i bebas.

yovel i ve aqedan gamodinare sakmaod di di far Tobi sasofl o sameurneo brunvi dan amovardni s saSi Sroeba iqmeba. rac Seexeba mi-Rebul produqciis axl a Znel ad mosaZebnia iseTi, romel ic dasav-veb fargl ebSi Seicavdes ni tratebs da mZime metal ebs.

ni adagiis nayofierebis Tanda-Tanobi Ti gaunj obeseba, dabal i Tvi TRi rebul ebis xarisxiani produqciis warmoeba da mineral uri sasugebis gamoyenebis Semcireba, dRes erT-erTi mTvari amocanaa.

aRni Snul is misaRwevad saWi rod mi gvaCnia agrowesebsi arsebul teqnoI ogiur procesebs daematos maval wl ovani da erTwl ovani parkosani bal axebs axl eburaad gamoyenebis teqnoI ogiebi:

agrowesebis srul i dacviT momzadebul ni adagze, gabatonebul i qarebis da morwyvis pirobe-

bis gaTval i swinebi T, farTobis yovel 150 sm-is daSorebi T erT mwkrivad unda dai Tesos maval - wl ovani l urj i ionj a saTesi manqani T (mcire nakveTze xel iT) im angariSi T, rom erT grZiv metrze aRmocendes 90-110 mcenare.

ionj is mwkrivTaSorisebSi i warmoeba bostneul isa da mindvriskul turebis produqcia Sesabamisi manqana i arRebis gamoyenebi T.

Ziri Tad kul turebi vegetaciis periodSi unda Sei Tesos erTwl ovani, mokl e vegetaciis mqone parkosani (magal iTad axal qal aqiscercvel a) siderati imis gaTval i swinebi T, rom produqciis mosavl is aRebis dros siderati i yos daparkebis sawyis fazasi da Cai xnas ni adagiSi erTad (am SemTxvevaSi ionj is naTibic igul isxmeba) ar unda dagvaviwydes kontrol i, dazianebl i mcenareebis moTxra da special urad gamoyo-fil adgil ze dawva. nacari ki dabrundeba i mave nakveTze.

aRni Snul i teqnoI ogiis gamoyenebi T pirvel i ve wl i dan iwyeba dasaxul i mznis ganxorciel eba. maval wl iani ionj a da siderati mcenare yovel wl iurad ni adags amdi drebs tonobi T organul i anarCenebi T da haeridan fiqsirebul i mni Svnel ovani odenobis azotiT, fosforiT da sxva, rac imis saSuail ebas iZI eva, rom TandaTan SevamciroT mineral uri sasugebis gamoyeneba da sami-oTxi wl is Semdeg, Tu mTI i anad ver gamovricxavT, gamoviyyenbT mxol od Zal zemcireao-denobi T ni adagiis laboratoriul i anal izis Sedegebis Sesabami sad.

mosal odnel i Sedegi: yovel wl iurad TandaTan amarI deba ni adagiis nayofiereba, mni Svnel ovnad davicavT qarisa da wyl is mieri eroziisagan, mi vi RebT sakvebad gemriel da sufTa, dabal i Tvi TRi rebul ebis maRal mosaval s.

*al eqsandre saral i Ze  
sm mecnierereba Ta doqtori.  
mTvari mecnier konsul tanti.*

*nato kakabaZe  
sm mecnier doqtori. bostneul -bar-  
Ceul i kul turebis nacional uri  
koordinatori saqarTvel oSi.*

*nugzar bendiani Svi I i  
mecnier TanamSromel I.*





# sagazafxul o samuSaoebi saSemodgomo xorbl i s naTesSi

adami anisaTvis saWiro sasursaTo produqtebSi puri yvel aze gamor-Ceul ia, amitom xorbal ssasofl o-sameurneo kul turaTanaTesebs So-rispirev i adgil i ukavia.

biologiuri Taviseburebis midvedvi TarCeven xorbl i saSemodgomo (roml ebi c mxol od Semodgomaze i Teseba), sagazafxul o (roml i Tesva gazafxul ze xdeba) da orTesel a (romel ic i Teseba rogorc Semodgomaze, ise gazafxul -ze) formebs. xorbl i marcvl is warmoebaSi saSemodgomo xorbl is xvedriTi wil i gacil ebiT metia, vidre misi sagazafxul o formebsa, rac imi Taa gamowveul i, rom misi mosavl i anoba ufro myari da saimedoa. saSemodgomo xorbal i ukeTesar i yenebs niadagis tens, ivi Tarebs mZI avr fesvTa sistemas da sagazafxul o xorbal Tan SedarebiT meti bartyobis unari aqvs.

saqarTvel oSi TavTavi ani kul-turebis saerTo naTesebsi 70% saSemodgomo formebs ukavia. xorbl i gavrcel ebis Ziri Tadi zonebia: kaxeTi, qarTI i, mesxeT-j avaxeti.

saSemodgomo xorbal i grZel i dRis mcenarea. misi aRmocenebis siswrafe damoki debul ia Tesl is xarisxze, niadagis damuSavebis mdgomareobaze, tensa da si Tboze. civ damral peri odSi aRmoceneba ori-sami Tvis gammavil obaSi xangr-ZI ivdeba, xol o Tbil sa da teniT

uzrunvel yofis as naTesi me-6 me-7 dRes aRmocendeba. Tesl i s gaRiveba i wyeba 1-2°C temperaturaze, magram aRmocenebi sa da normaluri zrda-ganvi Tarebis aTvis saWiroa 12-15°C, xorbl i bar tyoba normali urad mimdinareobs 8-10°C pirobebSi, xol o 3-4°C-zewyvetsvegetacias. masze uaryofi Tad moqmedebs dReRamuri temperaturis mkveTriyeva, dRisi T pl ius 5-10°C da RamiT – 10°C-mde, uTovl o zamTarSi damRupvel ia -16-18°C.

normal ur pirobebSi moTavsebul i xorbl i Tesl i s gaRivebi-saTvis saWiroa oTxi faqtori: si Tbos, sinatI is, haeraciis da tenis erTobl ivi moqmedeba, romel Ta gavl eniT endospermSi arsebul i sakvebi el ementebi iSI eba, gadadis xsnad mdgomareobaSi da xmardeba aRmonacenis ganvi Tarebas. niadagSi moTavsebul i marcvl i swrafad i Tvis ebs wyl s im momentamde, sanam tenianoba argaTanabrdeba niadagSi da marcvl Si. xorbl i marcvl i gasaRivebl ad saWiro wyl i raodenoba saSual od tol ia marcvl i wonis 55-60%-isa. kidev ufro izrdeba tenze moTxovnil eba bartyobis, aRerebis, marcvl i Casaxvisa da

damsxvi l ebis periodSi. tenis simci reaferxebs am procesebs, radgan Semcirebul ia sakvebi el ementebis Sesvl a mcenareSi, xorbl i s kul tura ciudad i tans gval vas.

Tesl i s garSemo haeris Seuferxebel i moZraoba misi gaRivebis auciil ebel i pirobaa. aqedan gamomdinare, yvel a is piroba, romeli ic niadagSi (niadagis piris Sekvra, wakirva an zedapiris gayinva, datborva, Warbi teni Tesl i ganlagebis adgil ze da sxva) haeris cirkul acias aferxebs, gaRivebis process xel s uSi i s.

## j e j i l i s ganoyiereba da farcxva

gazafxul ze, Cveul ebriv saSemodgomo naTesebi ramdenadme dasustebul ia. pirvel rigSi naTesis swrafi gamoj ansaRebis da zrda-ganvi Tarebis daCqarebis aTvis zrunva saWiro. am mi zni T j ej il s sagazafxul od, umTavresad azotiani sasuqebi T kvebaven. sarwyav da teniT uzrunvel yofil miwebzeminal uri sasuqebis ufro didi dozebi SeaqvT, vidre urwyav da gval vian zonebsi, radgan teniT uzrunvel yofil pirobebSi mcenare mineral ur sasuqebis ufro ukeT i Tvis ebs da misi ef eqtic metia.

naTesis gamosakvebad saWiroa 80-100 kg. azoti moqmedi nivTie-

rebis saxiT, rac fizikuri woniT 240-300 kg. ammonium gvarj il as udris. urwyav pirobebSi mizanSe-wonil ia mocemul i normebis 180-200 kg-mcl Semcireba.

gazafxul ze naTesebis gamokve-bis efeqtis asamari ebl ad azoti-an i sasuqis Setana mcenaris fesv-Ta sistemis areSi 6-8 sm siRrmeze umj obesia, rac Cveul ebri mar-cvl eul i kul turebis saTesi Tsrul deba. gamokveba tardeba kargad dabartyebul naTesSi. sus-ti, fesvebmoumagreb i naTesis gamosakvebad saTesi manqanis ga-moyeneba mizanSewonil i ar aris, radgan saTesi manqana naTess daa-zianebs.

gamokveba warmoebs adre ga-zafxul ze, rogorc ki Tovl i ai Reba, an niadagis zedapiri Se-reba da SesaZI ebel i iqneba naTesSi teqni ki T Sesvl a. sasuqebs Se-tanis Tanave xSi rad naTess msubuq kbil ebiani farcxiT farcxaven. mwkrivebis gardi-gardmo dafar-cxva, imis garda, rom axl ad Setani l sasuqs aqcevs niadagis tenian fenaSi, rac aadvil ebs mcenaris mier mis SeTvisebas, afxvierbs niadags da xel s uwyobs j ej il is ganaxl ebul bartybolas, spobs sa-revel ebsa da rac mTavaria, xel s uwyobs niadagSi tenis Senarcune-bas. mcenareebis nakl ebad dazi-anebis mizniT, j ej il is farcxva tardeba dabal sicqareze. naTesebis sagazafxul o dafarcxva 2-3 centneriT zrdismarcvl is saeq-taromosavl i anobas.

saSemodgomo xorbl is j ej il i gazafxul ze Sei ZI eba dai far-cxos, ris Sedegad iSl eban iadagi s qerqi, mcenareebs scil deba gamx-mari nawil ebi, iqmneba normal ur-i pirobebi xorbl is mcenareTa zrda-ganvi Tarebi aTvis. Tavis droze dafarcxva mni Svnel ov-nad amci rebs wyl is aorTql ebas, RonisZieba tardeba im dros, ro-ca niadagi kargad fxierebeba, ar-i zil eba gadaWarbebul i teniano-bis gan da ar imtvereba gamoSro-bis gamo.

**naTesis morwyva.** saSemodgomo xorbl i vegetaciis periodSi mni Svnel ovnad met wyl s moi Txovs, vidre sagazafxul o xorbl i. es-dakavSi rebul ia imasTan, rom saSe-

modgomoxorbal s axasiaTeb s uf-ro grZel i savegetacio periodi daZI eva ufrromet mosaval s.

saSemodgomo xorbl is norma-luri zrda-ganvi Tarebi aTvis uf-ro xel sayrel ia, roca niadagis zRvrul i tentevadoba 80-75%-ze dabal i ar aris. savegetacio peri-odSi saSemodgomo xorbal i xar-j avs 2500-4000 m<sup>3</sup> wyal s ha-ze.

tenze moTxovna damoki debul ia mcenaris xnovanebaze, zrdis inten-sivobaze, ganvi Tarebi s iZI i-ereze, niadagSi tenis arsebobaze, temperaturaze, haeris fardobi T tenianobaze, ganaTebaze, fesvTa sistemis ganvi Tarebaz, sakvebi nivTierebebis uzrunvel yofaze da sxva faqtorebsa da pirobebz.

rekomendebul ia naTesis Tesvis Semdgomi da savegetacio morwy-vebis Catareba. pirvel i savegeta-cio morwyva Catareba mcenaris aRerebis fazasi, xol o momdevno saWiroebis mixedviT daTavTave-ba-yavil obis da marcvl is Sevse-bis dros.

**mvnebl ebl s wi naaRmdeg brZol a.** xorbal s mni Svnel ovan zi ans aye-nebs da zogj er naTesebs da mi Re-

gazafxul ze, saSemodgomo xorbl is naTeseSi, marcvl ovanTa mav-nebl ebl aRmoCenis SemTxvevaSi mavnebl ebl wi naaRmdeg inseqt-i-ci debis Sesxureba tardeba. aseTi waml oba saWiroebis SemTxvevaSi Sei ZI eba ganmeordes.

**TavTaviani kul turebis umTav-resi mavnebl ebl**

**mwvaneTval a buzi** - masobrivi gamravl ebl SemTxvevaSi xorbl is aRerebis dros mcenareebis 50% azi-anebis. dazianebl i mcenareebis TavTavi foTi is xl Tidanver amodis, ibereba da ganvi Tarebas wywets. mavne buzebs Soris mwvaneTval a buzi yvel aze meti mavneobi T gamoirCeva.

**puris bzual a** – TavTaviani kul - turebis specifikur mavnebel Ta Soris erT-erTi mTavari mavnebel i. bzual a Sebindebi dan dil am-de soroebSi iTrebs j ej il s da f1 eTs, dRisiT soroebSi imal eba.

**Wia-wurbel a** – xorbl eul is foT-1 ebs azi-anebis rogorc matl i, ise xoWo, ris Sedegadac moTeTro feris wagrZel ebul i l aqebi war-moi qmneba, mcir deba saasimil acio moedani da mcenare sustdeba.

#### xorbal Si gamosaynebl ad rekomen-debul i herbi ci debi

mvnebel is dasaxel eba	preparatls dasaxel eba, xarj vls norma (l /ha, kg/ha, l /t, kg/t)	gamoyenebls xer-xi, dro, gamoyene-bis Tavisebureba	gamoyenebls jeradoba
rwyl ebl, Trifsebi, bugrebi, kusebura baR-l inj o, Wia wurbel a, mar-cvl ovanTa buzebl	arivo (cipermetrini) 0,2 l /ha, aqtel iki (pirimi-fos-meTII l) 1,0 l /ha, decisi (del tametrini) 0,25 l /ha.	Sesxureba vegetaciis periodSi	2
mvne kusebura, rwyl - ebl, WriWinobl ebi, bug-rebi, Trifsebi, puris xoWo ebl, buzebl	al pakl (al facipermetri-ni) 0,1-0,15 l /ha del tarini (del tametrini) 0,25 l /ha	Sesxureba vegetaciis periodSi	2
mdei os farvana, bug-rebi, Wia wurbel a, mar-cvl ovanTa buzebl, rwyl - ebl, puris xoWo	decisi (del tametrini) 0,25 l /ha, zol oni (foza-l oni) 1,5-2,0 l /ha	Sesxureba vegetaciis periodSi	2
xorbl is xoWo ebi, Tri-fsebi, mvne kusebura, bugrebi, xerxebl, Wia-wurbel a, WriWinobl ebi	val simba (l abdac gal o-trini) 0,2-0,4 l /ha, kalzo 0,2 kg/ha, karate (l abdac gal otrini) 0,2 l /ha karate zeoni 0,2 l /ha	Sesxureba vegetaciis periodSi	1

bul mosaval s mvnebl ebi mTl ia-nad anadgurebs. nawil i mwerebis xorbl is mcenares azi-anebis wuwniT, nawil i ki RrRnT. yovel i-ve amis codnas mni Svnel oba aqvs brZol is qimiuri RonisZiebebis gamoyenebis dros, radgan nawil i pestici debis moqmedebs kontaq-turi, nawil i ki sistemuri gziT.

sarevel ebi sgan naTesebis dacva. sarevel ebi sgan naTesebis dacvis RonisZiebaTa SemuSavebis dros uwinares yovl isa mxedvel obaSi unda mviRoT, rom sustad dasa-revl ianebis SemTxvevaSi saheqtaro mosavl ianoba 6-8%-iT mcir deba, xol o ZI ieri dasarevl ianebisas - 25-30%-iT da metadac. ami tom sa-

revel ebTan brZol a mosavl iano-bis gazrdis metad mniSvnel ovani da efeqtiani faqtoria.

mozamTre da saSemodgomo sarevel ebis mosaspobad saSemodgomo xorbl is mcenareTa aRmocenebam-de zogierT mikro-regionsi reko-

mendebul ia ZI ieri herbicidebis Setana. ZI ieri herbicidebi gamo-irCeva maRaI i efeqtianobi T, na-Tesebs sarevel ebiSgan 90-95%-iT asufTavebs da marcvl is mosavl is matebas heqtarze 0,30-0,059 tonam-de uzrunvel yofs.

herbicidebs, rogorc wesi, bartyobis fazaSi asxureben, maSin, roca haeris temperatu-ra 12-150C mi aRwves, ufro adre Sesxureba uaryofi Tad moqme-debs mcenaris Semdgom ganvi Ta-rebaze.

#### xorbal Si gamosayenebl ad rekomendebul i herbicidebi

preparatis dasaxel eba	xarj vis normal /ha, kg	sarevel ebi	gamoyenebi s wesi	gamoyenebi s jeradoba
2,4 d amini smarilli (avstria)	0,8-1,2	erTwl ovani da maval wl ovani farTofoTi ovani	naTesebis Sesxureba mcenaris 3-4 foTI is fazidan aRerebamde	1
grani endi (TurkeTi)	15-20g/ha	erTwl ovani da orl ebnianebl, maT Soris 2,4 d-s mi marT gamZI e	naTesebis Sesxureba sarevel is 2-3 foTI is fazaSi, xorbl is mcenaris bar tyobis damTavrebamde	1
eranstarl (Sveicaria)	15-20g/ha	erTwl ovani da orl ebnianebl, maT Soris 2,4 d-s mi marT gamZI e	naTesebis Sesxureba sarevel is 2-3 foTI is fazaSi, xorbl is mcenaris bar tyobis damTavrebamde	1
Iominatori (safrangeTi)	2-3	erTwl ovani marcvl ovnebi da orl ebniani sarevel ebi	Sesxureba mosavl is aRebamde 2kviri Tadre (marcvl is tenianoba (3%-ze naki ebl) xorbl is gamosaSrobod da sarevel ebi s nawil l bri vi gaxmobi saTvis	1
val smani (aSS)	0,8-1,0	erTwl ovani orl ebniani, maT Soris 2,4 d-s mi marT gamZI e, agreTve RIWas saxeobebl (nari da sxva)	Sesxureba xorbl is bar tyobis fazaSi	1
I ograni (Sveicaria)	6,5-10g/ha	erTwl ovani orl ebnianebl, maT Soris 2,4 d-s mi marT gamZI e, zoglerTi maval wl ovani orl ebnianebl	Sesxureba xorbl is bar tyobis dasawyl s dan aRerebamde gadasvl amde. erTwl lanl da maval wl lanl sarevel ebi s wi naaRmdeg gamoyeneba SeiZI eba maSin, Tu ni adagebSI PH ar aRemateba 7-s	1
puma superl	0,8-1,2	erTwl ovani marcvl ovnebi (Svruka, Zurwas yvel a saxeoba)	sarevel ebze Sesxureba xorbl is mcenaris 2 foTI is fazidan bar tyobis damTavrebamde	1
topiki (Sveicaria)	0,3-0,4	Svruka	Sesxureba sarevel ebi s ganvi Tarebis 2-3 foTI is ganvi Tarebis fazidan.	1

#### 06 საინტერესო

## mandarinis SeuZl ia gaxdomaSi dagexmaroT

koreel ma mecnierrebma kvl evis axal i Sedegebi gmoaqveynes, romel sac i sini mandarinze atarebdnen. rogorc irkveva, amci trusis regul arul ad mi Rebas adami anis zedmeti cximi anobasa da cirozisgan dai ca-va SeuZl ia.

samxret koreel ma mecnierrebma eqsperimenti sko-l aSi Caatares, sadac 60 i seTi bavSvi SearCies, rom-I ebsac zedmeti wona awuxebdaT da sportul darbazebSi yovel dRiurad special ur varj iSebs itarebdnen. varj iSTan erTad mkvl evarebi eqsperimenti monawil e 60 bavSvidan 30 regul arul ad yovel dRe asmevdnen mandarinis wvens. eqsperimenti dasrul e-bis Semdeg, gairkva rom 30 mozardi, roml ebi c mandarinis wvens i Rebdnen, TavianTi Tanaskol el ebiSgan SedarebiT sami Tvis ganmavl obaSi wonaSi 1.5%-iT dai kl es.

ki dev erTi cda Catarda virTagvebze. mRrRnel ebs ukeTebdnen mandarinis koncentratis ineqcias. eqsperimenti ganmavl obaSi mRrRnel ebma mucl is areSi cximebis 59% dakarges, saer Tod ki virTagvebma wonaSi 45%-iT dai kl es.

amasTan erTad koreel i mecnierrebmi vi dnen i azramde, rom mandarin i dadebi Tad moqmedebs Rvi Zl is uj reddebze, xel s uwyoobs maT aRdgenas. amJamad, i sini mandarinis sgan samkurnal o sasmel i dasamzadebl ad muSaoben.

xal xur medicinaSi cnobil ia, rom spirtze damzadebul i mandarinis qerqis nayeni xel s uwyoobs madis momatebas da saWml is monel ebis procesis normal urad warmarTvas. agreTve igi cnobil ia, rogorc bronqit i sawinaaRmdego saSual eba.



# wi Tel i da Savi mocxari \_ moyvanis agroteqnol ogiuri Taviseburebebi



mocxari maRaI i sakvebi Tvisebebi T gamoir Ceva da didi raodenobi T j anmr Tel obisaTvis sasargebl o nivTierebebs Seicavs. mis moxmarebas urCeven samedicino mi zniT arTritebis da revmatizmebis samkurnal od. dadgenil ia, rom mocxaris mi Reba RviZI is da Tirkml is funqciebis cxovel qmedebas aumj obesebs. miCneul ia, rom es kenra xasiaTdeba anTebis sawi naaRmdego efeqtiT da sasargebl oa gul -sisxl ZarRvTa sistemis gamarTul i muSaobisaTvis. mocxari warmoadgens askorbinis mJavis erT-erT saukeTeso wyaros sxva xil -kenkrovan kul turebTan SedarebiT (wi Tel i mocxari – 40 - 45 mg/100g, Savi mocxari – 170 - 190 mg/100g).

msofl i oSi mocxaris farTobebi 120 000 ha. moi cavs, xol o mTI i ani warmoeba 642 000 tonas (2010) Seadgens, roml is 50 %-ze meti ruseTze (327 000 tona) modis. mocxaris msxvil i mwarmoebl ebi asevarian: ukraina, pol oneTi, avstria, inglisi dasxva.

samwuxarod, saqarTvel oSi mocxaris warmoebis Sesaxeb statistikuri monacemebi ar arsebobs. igi gavrcel ebul ia mxol od sa-

mocxari Ribes-is gvaris erT-erT uZvel esi da cnobil i kenkrovani kul turaa, romel ic maval saxeobas aerTlanebs. samrewel omni SvneI oba aqvs mxol od ramdenime maTgans, romel Tagan gamoyofen wi Tel (Ribes rubrum) da Sav mocxars (Ribes nigrum), aseve SezRudul i komerciul i datvirTva aqvs ogrosfer (narinj isfer) mocxars (Ribes sativum), romel ic botanikurad wi Tel i mocxaris saxesxvaobas war-moadgens.

karmidamo nakveTebze, Ziri Tadad aRmosavl eT saqarTvel oSi erTeul i buCqebis an mcire j gufuri nargaobis saxiT. ramdenime sam-

*mocxaris 11 umsxvil es i mwarmoebel i ms ofl i oSi, tona, 2010*

ruseTi	327 000.00
pol oneTi	190 782.00
ukraina	25 800.00
avstria	22 920.00
ingl isi	17 300.00
germania	11 927.00
dania	11 500.00
axal i zel andia	7 800.00
safrangeTi	7 440.00
ungreTi	3 853.00
hol andia	3 000.00

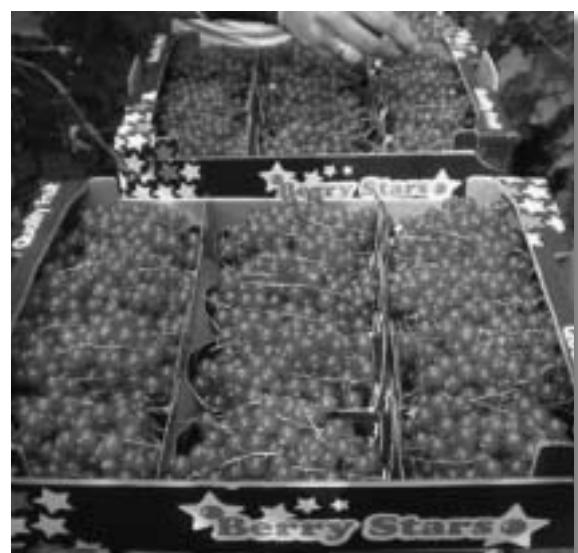
wyar o: FFAOstat,2012

rewvel o daniSnul ebis mcire pl antacia gaSe-nebul i agoris da kaspis municipal itetebSi.

Sida samomxmarebl o bazarze am produqtis importi ar xdeba da arc eqsportis monacemebia dafiqsirebul i. sezoni sganmavl obaSi mocxaris sabiTumo sabazro fasi 1,8 - 2,8 l ari/kg-ze fargl ebSi meryeobs. real izacia Ziri Tadad xdeba mcire partiebiT (10-20 kg.).

## agrobiol ogiuri Taviseburebebi

mocxari maval wl iani buCqia, roml is axal i totebi warmoiqmneba buCqis qveda nawil idan. ivi Tarebs funj a fesvTa sistemas, romel ic Ziri Tadad ganl agebul ia niadagis zedapi rTan 10-40 sm-is siRrmeze. Savi mocxaris nayofebi erT buCqze da erT mtevanzec araerTgvarovnad mwifdeba, sanayofe mtevnis zeda nawil Si ufro msxvil nayofebs isxams, xol o mtevnis wverisken nayofebi ufro wvril ia. nayofebi ufro adre Semodis buCqis fuZesTan, xol o gvi-an - buCqis kenwer oSi. rogorc wi-Tel i, aseve Savi mocxari j iSebis mixedviT, Ziri Tadad ivnisis meore naxevidan ivl isis bol omde mwifdeba. Savi mocxari, nayofis feris garda, wi Tel i mocxaris gan kafio od gamoxatul i specifikuri suni Tac gansxavdeba.



## **moTxovna garemo pi robebi sadmi:**

moxari tenis mimarT momTxovnia da wyl iT uzrunvel yofil, magram drenirebul niadagebs moTxovs. mcenare kargad xarobs rogorc msuq Tixnar, aseve qviSnar niadagebze. mJave niadagebi moTxovnis gasaSenebl ad ar gamodgeba, ami tom aseTi tipis niadagebSi dargvisas auci ebel ia kirisSetana. maRal i karbonatebis Semcvel niadagebze ki aRini Snea mosavl ianobis Semcireba da mcenaris zrda-ganvi Tarebis SezRudva. aseT SemTxvevaSi auci ebel ia niadagis aris reaqciis damwevi saSual ebebis gamoyeneba, rogoricaa, gogirdmJavas susti xsnari (swrafi moqmedebis), revoneti (niadagis damamJavebel i agenti), kol oiduri gogirdi (prol ongi-rebul i moqmedebis), da sxva.

moxari xasiaTdeba maRal i zam-TargamZI eobiT, uZI ebs 28-32°C yinvas, Tumca gazafxul is gvian wayinvebis mimarT mgrZnobiarea. gasaTval i swinebel ia, rom rogorc Savi, aseve wiTel i moTxari mgrZnobiarea zafxul is maRal i sicxebis mimarTac. ami tom cxel i zafxul is pirobebiSi zog pirobebiSi ziandeba foTI ebis awiT.

### **dargva.**

wiTel i da Savi moTxovnis pl antacia SesazI ebel ia Semdegi sqa-miT 3 X 1,0; 2,5 X 1,0 da 2,2 X 1,0 ga-Sendes. umj obesia SemaRI ebis bazo-kvl ebis mowyoba da maTze dargva. moTxovnis nergi irgveba 40 sm diametris da 30 sm-i si Rrmis ormoSi. dargvisas odnav damokl-deba fesvebi, xol o nergi dairgveba 3 - 5 sm-iT ufro Rrmad vidre i zrdeboda sanergeSi, odnav dax-rii mdgomareobaSi, raTa niadagi moqceul i kvirtebidan intensi-urad ganvi Tardes axal i totebi, rac xel s uwyobs buCqis formis swraf warmoqmnas. dargva SeiZI eba rogorc Semodgomaze, aseve – adre gazafxul ze.

### **damtverva:**

imis miuxedavad, rom moTxovnis umtesi j iSebi TviT damtveravia, mosavl is xarisxs da raodenobas mni Svnel ovnad zrdis j varedini

damtverva, ami tompl antaci i er-Ti j iSiT gaSeneba rekomentebul i ar aris.

### **dacva mavnebel -daavadebebi sagan:**

moxari ziandeba rogorc mavnebel ebiT, aseve daavadebebiT, sa-qarTvel os pirobebiSi mcenareebs gansakuTrebit did zians ayenebs nacari da anTraqnozi, aseve septoniozi. xol o mavnebel ebidan-xurtkmel is mzomel a da abl abudiani tkipa.

nacari ZI ier azianebs gansakuTrebit Sav moTxovnis, pirvel i simptomebi vl indeba yvavil obis dasrul ebis Semdeg, rac gamoixa-teba foTI ebze moyviTal o-yaviss-feri I aqebis warmoqmnaSi, rome-I ic Semdeg muqi feris gamxmar adgil ebs tovebs. sagul isxmoa, romrusul i sel eqciis j iSebi nakl ebad ziandebian nacriT, vidre evropul i j iSebi.

zogadi dacvis sistema moi cavs rogorc meqanikuri, aseve qimiuri dacvis RonisZiebebis Catarebias. meqanikuri RonisZiebebi dan auci ebel ia adre gazafxul ze nakveTiS gasuf Taveba Camocveni- l i foTI ebisagan da gasxvl a, moberebul i totebis moci l eba.

pirvel i waml oba kvirtis gaSI amde bordos narevis 3%-iani xsnariT tardeba, Semdegi waml obebi ki – Semdegi TanmimdevrobiT: yvavili obamdekol oiduri gogirdi 1%-iani xsnariT Sesxureba, yvavil obis dasrul ebis Semdeg xorciel deba nacris sawinaaRmdego fungi cidebis gamoyeneba: topazi (100 ml /100 l itrze), fal koni (60 ml /100 l itrze) da sxva. mavnebel ebis (tkipebi, mzomel ebi) kerebis SemTxvevaSi aRiniSnul preparetebs ematebaT inseqticidebi (dursbani 200 ml /100 l itrze an biol ogiuri inseqtici-di Bt-is bazaze dipel i 100 ml /100 l itrze, tkipebiS gamoCenis SemTxvevaSi -masai an envidor i (70 ml /100 l itrze). Semdeg waml oba grZel deba 10 - 12 dRiani interval iT.

### **ganoyi ereba:**

ganoyierebisatvis iyeneben gadaMvar nakel s da mineral ur sa-suqebs: srul msxmoiarobaSi azotiT gamokvebisatvis iyeneben amo-

ni umis gvarj il as or vadasi: adre gazafxul ze – 80 -100 grami mcenareze, naskvebis periodSi 40 - 50 grami mcenareze. axal gazar da barSi i yeneben am dozis naxevars.

fosfor-kaliumiT kvebisatvis mimarTaven kompl eqsuri sasuqe-bis Setanas gvi an Semodgomaze mi-waSi CakeTebiT, (8 - 26 - 26) sasuqiS SemTxvevaSi 100 - 150 grami sasuqi erT mcenareze. aseve metad sasaregbli oa special uri foTI is kompl eqsuri sasuqeberi erTj eradi an orj eradi gamoyeneba mi Ti Tebul i dozis mixedviT fesvgareSe gamokvebisatvis.

sarevel ebis winaRmdeg brZo-l a: rogorc yvel a kenkrovani kul tura, romi is fesvTa sistema zedapirul ad aris ganl agebul i, moTxovnis nakl ebad uZI ebs sarevel ebTan konkurencias, ami tom maT sawinaaRmdegod sabrZol ve-l ad mimarTaven Semdeg meTodebs: moTxovnis rigis dafarva naxerxiS 5 - 8 sm-iani simaRI is mul CiT, sxva meTodebidan SesazI ebel ia mxo-l od iseTi specifikuri sel eq-tiuri herbicidebis gamoyeneba, rogoricaa pantera an targa superisuperi (mxol od marcvl ovan sarevel ebze, adreul stadiebSi, 250 ml /100 l itrze), l ontrel i, stingeri (125 ml /100 l itri) far-TofoTI ovan sarevel ebze)

### **gasxvl a:**

#### **wiTel i moTxovni**

wiTel i moTxovnis gasxvl is mTavar i mizania gadaSI il i, kargad ganaTebul i buCqis miReba, sadac xorciel deba moberebul i Ziri-Tadi totebis axal i totebiT cikluri Canacvl eba da regul arul i gameCxereba CaxSirebis Tavidan acil ebiSmznit.

Iwel s formireba iwyeba dargvis Semdeg, dargvis dros nergis yevi a toti niadagi dan 3-4 kvirtze gadaiWreba.

II wel s wina wl is nazardebi-dan SeirCeva da darCeba mxol od 3-4 yvel aze ZI ieri toti, xol o yvel a danarCeni toti amoiWreba rgoI ze. Tu nazardi sustia, ZI ieri totebis damokl eba niadagi-dan 10-15 sm-i simaRI eze xdeba.

III wel s yvel a orwl iani toti darCeba, maTze ganvi Tarebul i

zogierTi CamaxSi rebel i meoradi totebi an damokl deba an amoivreba. wina wl is totebidan darCeba mxol od yvel azeZI ieri, sivrceSi proporcil ad ganl agebul i 3-4 toti; danarCeni nazardebi amoivreba ngol ze.

IV wel s buCqebze darCeba yvel a 3-wl iani da 2-wl iani toti. maTze ganvi Tarebul i zogierTi CamaxSi rebel i meoradi totebi an damokl deba an amoivreba. wina wl is nazardidan darCeba mxol od yvel azeZI ieri 3-4 toti; danarCeni nazardebi amoivreba ngol ze.

Vwel i da Semdeg - amoivreba yvel a 4-wl iani, moberebul i toti. wina wl is nazardi dan darCeba mxol od yvel azeZI ieri 3-5 toti. zogadad mocxaris gasxvl isas daculi i iqneba sxvl is Semdegi principi: amoisxvl eba dazianebl i, daavadebul i, niadagze garTxmul i da CamaxSi rebel i totebi, danarCeni nazardebi amoivreba ngol ze. buCqSi ar darCeba 4 wel ze meti xnis toti. sworad Camoyal ibebul i mocxaris buCqi Sedgeba 3-4 erTwI iani, amdenive orwl iani da samwI iani Ziri Tadi totebi sagan.

### Savi mocxari

Savi mocxaric isxvl eba wi Tel i mocxaris msgavsdad, gansxvavebul iia mxol od 2-3 sanayofe wl iani totebis gasxvl a: mesame wl i dan

mimarTaven am totebis damokl ebas gantotvis adgil amde da meorad totebzegadavanas.

### j i Sebi

Savi dawi Tel i mocxarisj iSebis farTo speqtri arsebobs, roml e-bic gansxvavdebiam simwifis periodiT, buCqis zrdissiZI ieriT da formiT, nayofebis zomiT, gamZI leobiT daavadebebis mimarT da sxva sel eqcia mxol od ruseTSi gamoyvanil ia mocxaris 200-ze meti j iSi. qvemoT mocemul iamokl e informacia mocxaris zogierTi farTod gavrcel ebul i j iSi bilog iur-sameurneo Taviseburebebi s Sesaxeb:

### Savi mocxari

#### gl obusi

**warmoSoba:** rusul i j iSi, mi Rebul ia ekaterinburgis kvl eviT sadguriSi gasul i saukunis 80-i an wl ebSi t.Saginismier.

**mcenare:** zemotmimarTul i kompaqturi buCqia, xasiatdeba TviT-damtvervismaRa i procentiT (60 - 65%), uxvmosavl iani, nakl ebad ziandeba nacriT.

**nayofi:** saSual oze msxvil i, (saSual o masa 1,5 - 1,8 grami), nakl ebad gamoxatul i mZafri gemoti, gamosadegia nedl ad moxmarebi-saTvis. saSual o mosavl ianoba 7 - 8 tona/ha.



### gol i aTi

**warmoSoba:** ruseTSi gavrcel ebul i j iSi, mi Rebul ia peterburgi kvl eviT institutSi. sinonimi: leningradis bagatiri.

**mcenare:** i vi TarebsZI ieri zrdis buCqs, nakl ebad gamZI ea anTraqnozi sa da nacris mimarT.

**nayofi:** saSual o zomis, masa 1,2 - 1,5 grami, universal uri moxmarebisaa. saSual o mosavl ianoba 8 - 11 tona/ha.

### ben sareki

**warmoSoba:** Sotl andiis sofl is meurneobis kvl eviT institutis (dandi, edinburgi) sel eqciis j iSi.

**mcenare:** xasiatdeba dabali, kompaqturi buCqiT, uxvmosavl iania, ziandeba nacriT, ufronakl ebad - anTraqnoziT.

**nayofi:** msxvil i, saSual o masa 1,5 - 2,1 grami, advil ad mosakrefia dabertyiT. saSual o mosavl ianoba 8 - 10 tona/ha.



### ti tani a

**warmoSoba:** Svedi sel eqcioneis pal tamasiS j iSi, mi Rebul ia gasul i saukunis 80-i an wl ebSi.

**mcenare:** saSual o si didis buCqs  
i vi Tarebs, nacriT nakl ebad zian-  
deba, tol erantul ia anTraqno-  
zis mi marT.

**nayofi:** saSual o zomis, saSual o masa 1,3 - 1,7 grami, heqtarze mosavl i anoba 8 - 12 tona/ha.

www.Tel-i-mocxarirovada

**mcenare:** evropis wamyvani ho-  
l andiuri jisia,

**mcenare:** saSual o simaRI is buC-  
qiT xasiaTdeba, wiTel i feris,  
vertikal uri nacrisadmi nakl e-  
bad gamZI ea, adre moyvavil ea da  
advil ad mosakrefia.

**nayofí:** saSual o-sagvi ano sim-

wifis periodis, gamoir Ceva sau-  
cxoo sagemovno Tvisebeti. ke-  
nkra msxvil ia, saSual o masa 0,7-  
0,8 grami, mtevnis sigrZe 8 - 10  
sm, saSual o mosavl ianoba 10 - 12  
tona/ha.

| onker van tetsi

**warmoSoba:** Zvel i hol andiuri  
j i Sia, gamoyvani l ia iohan maar ses  
mier gasul i saukuni s 30 wl ebSi .

**mcenare:** iviTarebs vertikal u-  
rad mimarTul buCqs, nacrisadmi  
tol erantul ia, adre iwyebss yva-  
vil obas.

**nayofl:** saadreo simwi fis perio-  
dis, xasi aTdeba saucxoo sagemov-  
no Tvi sebebi T.



*zvi ad boboqaSvi i  
sofI is meurneobi smecnierebaTa,  
akademiuri dogtori*

# m u l c i r e b a



dRes, rodesac msofI i oSi aqtual uri xdeba wyl is resursebis dazogva, Sxam-qimi katebis gamoyeneba da Sromi Ti danaxarj ebis Semci reba, axal teqnoL ogi- ebs sul ufro meti fermeri iyenebs. erTerTi ase- Ti meTodia mul Cireba, romel ic mowinave qveynebis sofI is meurneobis produqtEBIS, gansakuTrebiT bostneul isa da kenkris warmoebaSi aqturad gamo- iyeneba.

mul Ci es ar is masal a, roml i Tac ni adagi s zedapi ri  
i fareba, ar sebobs mul Ci s ori Zir Tadi saxeoba: or-  
qanul i da ara or qanul i.

# NEO New Economic Opportunities Initiative

*saxel i, gvarl*

*misamar Ti*

*tel ..*

*el fostra*



mul Cireba saSual ebas iZI eva minimal ur doneme de SevamciroT wyl is moxmareba da aorTql eba, es gasakuTrebiT im regionebisTvisaa mniSvnel ovani, roml ebic kul turul i mcenareebis aqturi vegetaciis periodSi wyl is nakl ebobas ganicdian (ma-Ral i temperaturebisa da sairigacio wyl is simciris gamo).

mul Cireba aCerebs niadagis eroziis procesebs, aregul irebs niadagis temperaturas (dil iT igi Tbebaufroadre, xol o saRamoscivdebaufrogvian, dRe-Ramis manZil ze niadagis gaTbobi sa da gacivebis procesi xdeba ufro Tanabari), aCerebs sarevel ebis ganvi Trebas da Sesabami sad samuSaTa si idan agdebs iseT Sromatevad da rTul procesebs, rogoricaa Toxvna da margvl a, gamori cxavs herbicidebis gamoyenebas da Sesabami sad amcirebs garemos qimi ur danZurebas.

organul i mul Ci niadags amdi drebs sakvebi el ementebiT da Wiayel ebis cxovel qmedebisaTvis xel -

sayrel pirobebs qmnis, roml ebic niadags humusiT amdi dreben.

mul Cireba aferxebs niadagis strukturis gauaressebas da mis datkevnas.

mul Cirebul nakveTze, kul turul i mcenareebi ufro mZI avr fesvTa sistemas iviTareben, vidre mul Cirebis gareSe.

mraval i fermeli iyenebs special uri Savi feris pol ieTil enis firs, roml is sisqe meryeobs 20 mikronidan 50 mikronamde. erTwl ovani bostneul is warmoebaSi mimarTaven Txel i 20-30 mikroniani pl astikuri firis gamoyenebas, roml is eqspl uatacis xangrZI ivoba 6-8 Tvi dan erTwl amde gani sazRvreba, xol o kenkrovani kul turebSi ufro sqel i pol ieTi- l enis firi, an sxva masal i sagan damzadebul i firebi gamoyeba (es firebi damzadebul ia gansxavebul i teqnoT ogi iT da Sesabami sad maT aqvT wyl is da haeris gatarebis unari), romel Ta eqspl oataciis xangrZI ivoba ramdenime wel ia.

did farTobebze mul Cirebas specil uri mul Cis damgebi manqanebi T akeTeben. mul Cirebis dros, gazafxul ze niadags Cveul ebrivad afxviereben, akeTeben SemaRI ebul kvl ebs, romel Ta sigane teqnikaZea damoki debul i, Tumca misi kl asikuri zomebi 0,9metridan 1,1-1,2 metramde meryeobs. winaswar kvl ebze aTavseben erT an or wveTovani morwyvis mil s. dResdReobiT msfol ioSi da saqarTvel oSic arsebobs aggregatebi, roml ebic yvel a zemoT CamoTvl il i opercias erTdroul ad asrul ebs (frezavs, afxvierebs niadags, asworebs mis zedapi rs, akeTebs SemaRI ebul kval s, roml is simaRI ec SeiZI eba 10 sm-dan 30 sm-mde daregul irdes (cal keul danadgarebs SeuZI iaT ufro maRal i kvl ebis gakeTebac 30-50 sm, rac Zal zed mniSvnel ovania Warbteniani regionebisatvis da kenkrovani kul turebisaTvis), SI is wveTovan morwyvis mil ebs da agebs sxvadasxva siganis pol ieTil enis firs.





mul Ci s dagebisas gansakuT-rebul i yuradReba unda mieqces firis kideebis miwi T Tanabrad dafarvas, Tu rai me mizezis gamo (teniani niadagi, damreci nakveTi, niadagis mZime strukturul i Semadgenl oba, qariani amindi da a.S.) firis kideebi ramdenime adgil as ar dai fara qarian amindSi Sei qmneba saSi Sroeba, rom qarma aaZros firi, an daazianos masze gadargul i mcenareebi. mul Ci-rebis firs Ci Ti l ebi s gadargvis win amoWrian dani T an makratl iT, amoWri l i naxvreti unda iyos zomieri, mcire di T unda aRematebodes gadasargavi Ci Ti l i substratis daimetrs, winaamRdeg SemTx-vevaSi Si qmneba imi s safrTxe, rom didi naxvretidan kul turul i mcenaris ganvi Tarebamde amoar-wi on sarevel ebma da maTi moSoreba damatebi T Sromi T danaxarj ebs gamoiwvevs. dResdReobi T arsebobs Ci Ti l i sargavi manqanebi, roml ebic Tvi Tonve Wrian firs

da rgaven Ci Ti l s. Ci Ti l i s gadargvis win SemaRI ebul kvl ebs rwyaven.

garkveul probl emebs qmni s mosavl i s aRebis Semdeg firi s narCenebis gawmenda, am i s gamo ukansknel wl ebSi evropaSi da amerikaSi ssvadasxva organul i masal ebi s nazavi sagan damzadebul i mul Ci-rebis firebi inergeba, roml ebic kul turul i mcenareebis vegetaciis bol osaTvis Tvi Tonve iwyeben daSl as.

mcire da sakarmi damo nakveTebsi ufronni Svnel ovani a da upiratesoba unda mi vani WoT organul i masal ebi sagan damzadebul samuli Ce masal as. ami saTvis Sei Zi eba gamovi yenoT Ti va, kargad gadamwvari nakel i, bal axis ganaTibi, motibul i sarevel ebi (isi unda moi Tibos Tesl ebi s warmoqmnande), naxerxi an xi s burbuSel a, mu-yao da a.S.

### III a mMedi iZe

P.S. wi namdebare statiebis gamocema Sesal ebel i gaxda amerikis Seer Tebul i Statebis saer TaSor i soganvi Tarebissaagentos (USAID)mer gaweul i daxmarebis Sedegad dokumenti SemuSavebul ia USAID/NEO proeqtismler damisi Sexedul ebeblsgaTval i swinebt statiebi ar gamoxatavs amerikis Seer Tebul i Statebis saer TaSor i so ganvi Tarebisa saagentosa da amerikis Seer Tebul i Statebis mTavrobis mosazrebebs.

daavadebul i kartofili i  
sursaTis erovnul ma saagentom 25 tona mcenareTa gansakuTrebit saSi Si sakarantino mavnebl iT „kartofili is kiboTi“ dasnebovnebul i kartofili i gaanadgura. aRni Snul i tvirTi importis saxiT Semovi da TurqeTi dan. sabajo samsaxursi Semowmebis Sedegad dadginda, rom nedl eul i dasnebovnebul i yo. Iaboratoriul i kvel vis Sedegebbe dayrdnobi T, sursaTis erovnul ma saagentommi i Rogadawyvetil ebami si ganadgurebis Sesaxeb. paral erul ad, TurqeTis mxares gaetzava Setyobi-neba Semdgomi reagi rebi saTvsi.

kartofili iski bo saSi Si sakarantino daavadebaa, roml i gamomvevia soko – Synchytrium endobioticum. i gl Sei cavs mi kotoqsi nebs, ris gamoc misi sakvebad gamoyeneba ar aris mi zanSewoni i.

aRsani Snavia, rom saqr Tvel osi aRni Snul i sakarantino daavadeba ar fiqsirdeba.

### Sexvedra sasakl aos warmomadgenl ebTan

sursaTis erovnul i saagentos ufrosi zurab CekuraSvil i sasaki aos warmomadgenl ebs Sexvda da xorcpoduqtibis bazarze arsebul i vi Tareba gaacno. bi znesopratorebs gaacnes aseve arsebul i kanonmdebl oba.

Sexvedraze saubari Seexo bol o periodSi xorci T movalreTa protests, roml ebi c sasakl aosgverdis avl iT i Txovdnen saqonl i s d kvl is nebar Tvas, rac kanondar Rvevaa.

arsebul i kanonmdebl obi T, Tu rai onSi aris erTi sasakl ao mai nc, maSi n saqonl i sasakl aoze saxel mwi fo veterinarianis zedamxedvel obi T unda dai kl as. misi ar arsebabis SemTxvevaSi saqonl i s d kvl a special urad gamoyofili adgil ze mowveul i saxel mwi fo veterinarianis zedamxedvel obi T unda moxdes.

Sexvedraze aRi n Sna aseve, rom cxovel i sasakl aoze d kvl a aris momxmarebl i sTvis erTaderTi garantia, rom Zroxis xorcis dasaxel ebi T i s ar m i rTmevs saellvo warmomavl obis cxenis, viris an svxa cxovel i xorcs.

am etapisTvis saqr Tvel os mass-tabi T 46 sasakl ao funqcionirebs.



# Syngenta Agro services AG

Sveicarul i firma „Syngenta” maRal xarisxiani mcenareTa dacvis saSual ebebis, sasofl o sameurneo da dekoratiul i mcenareebis Tesl ismarmoebel i msofli oSi saxel ganTqmul i lideri kompania. „Syngenta”-s produqciias saqarTvel os bazarze ukve kargad i cnoben da i gi qarTvel fermerebs Sorisndobi Ta da dii popul arobi Tac sargebl obs.

kompaniis warmomadgenl obis – „Syngenta” agroservisi s amierkavkasiis ofisi saqarTvel oSi 2009 wel s gai xsna damisi direqtori mcenareTa dacvis cnobil i special isti, mecnierebaTa doqtori zurabl ol aZea.

– Sveicarul i firma „Syngenta” msofl ios 120 qveyanaSi muSaobs da 90 aTas TanamSrromel siTvl is.

amierkavkasiis warmomadgenl oba Tbil isSi marTali ia diidi xani ar aris rac Sei qmna, Tumca qveyanaSi am brands ukve maRal i niSa uWi ravs, rac udavod warmomadgenl obis menej mentis damsaxurebacaa.

rogorc direqtori ganmartavs, maT funqciasi Sedis bazris mxardawera, l eqciebis, konsul taciebis, sademonstracio cdebis Catareba, axal i produqciis registracia-popul arizeba, fermerebis momzadeba da treiningebis gamarTva rogorc mcenareTa dacvis saSual ebebze, i se – Tesl ze.

Syngenta-agroserviss saqarTvel oSi sami oficiuri partnori firma hyavs: „agrotreiding pl iusi”, romel ic „Syngenta” produqciis real izacias eweva, kompania „boran qimia” da firma „agrosani”, romel ic bostneul is, rogorc Ria, asevedaxurul i grunitisaTvis, Tesl is real izaciaze muSaobs. amis garda somxeTsa da azerbaijanSi kompanias or-ori partnori hyavs.

rogorc batoni zurabi ambobs, maTi special istebi adgil ze Cadian da fermerebs aswavl ian, rogor moiyanon esa Tu is kul tura, ra saSual eba gamoi-yenon, rogor dai cvan naTesebi mavnabl ebi sgan, daavadebebi sagan, sarevel ebi sagan, ra preparati rodis gamoi-yenon da sxva.

– Cven qarTul enaze yovel wl iurad special urcnobars vamzadebT – gveubneba zurab l ol aZe – sa-

dac yvel a produqciacea amomwuravi informacia da i gi momxmarebl ebs urigdeba. ofisebSi gvyav momzadebul i konsul tantebi, roml ebic mzad arian nebis mier dr os Cavidnen adgil ze da Sesabamisi daxmareba gauwi on fermerebs. „Syngenta”-s produqcia mTel saqarTvel oSi popul arul i a da dii ndobi Tsargebi obs. Cven absol uturad yvel akul turas movi cavit, rogorc-erTwl ians, i semraval wl ians: xexil s, marcvl eul s, bostneul s, bol qvovnebs da sxva.

„Syngenta”-s produqcia maRal i xarisxis evropul i warmoebi sa da standartebi s Sesabamisi a. amas axl a gansakuTrebui i mni Svnel oba aqvs, radgan produqciis SerCevi s Cvens fermerebs di di yuradReba marTebT.

CvenTan, saqarTvel oSi xSirad aris SemTxvevebi, rodesac gl exi tyuvdeba, yidul obs, raRac saelWvo warmoebi s produqciias, Zal ian iafad meoTxed, me-xuTxed fasad da mTel i wl i mosaval i ekargeba. amis Zal ian bevri mware magal iTi gvaqvs. mere morbian es fermerebi, – dagvexmariT, gvi Svel eTo, magram ganadgurebul mosaval s ukverafers uSvel i. ami tomunda gavTval oT, Sevi ZinOT xarisxi ani produqcia, romel i cmarTal ia iafi ar Rirs, magram saimedoa da garantirebul i xar, rommosaval sacdai cav, arc oj axs dawaml av da arc maT, vinc amproduqt s Sei Zens.

– Cven sakmaod bevri momxmarebel i gvyav. ver getyviT rom yvel a mcire meurnes SeuZl ia masobrivad Cveni produqciis SeZena, fasi maqvs mxedvel obaSi, magram cota SeZl ebul fermers Tavisufi ad SeuZl i a sargebl os, rogorc Cveni produqciiT, i se mom-saxurebi T. axal i mTavroba dapi rebi T movi da da saxel mwif o daxmarebebi c i qneba. pirvel i, oriwel i saxel mwif o Seecdoba fermeli fexze dadges. rogorc iTqva, mcire meurneebs, daaxl oebiT naxevar mi l ion adami ans, saxel mwif o dauxnavs, dauTesavs da sasuqi Ta Tu mcenareTa dacvis saSual ebebi T uzrunvel -yofs, raTa i sinifexze dadgnen, gaZl i erdnien, mosaval i moiyanon da zedmeti produqt i gayidoni dec. mTavroba yvel afers akeTebs, romqarTul i produq-

cisTvis evropisa da ruseTis bazari gaxsnas. Tu Semosavl is wyaro gauCndeba, gl exi Tvi Ton airCevs, romel i produqtmoi yvanos da mcenareTa dacvis ra saSual ebebi Sei Zinos. roca saSual eba eqneba, eWvi ar SegeparoTrom igi kargsa da xarisxi ans airCevs.

kompanias Tavisi konsul tantebi da gamocdi i agronomebi yavs, roml ebic CvenTan mosul fermerebs konsul tacias uweven. amis garda, Cveni centrebi gvaqvs rai onebSi, roml ebsac TavianTi konsul tantebi yavT. rai onebi dan Sei ZI eba gl exebi yovel Tvis ver Camovi dnen, magram maT adgi l ze SeuZI iAT Cveni produqcac Sei Zinon da konsul taciac mii Ron. Tu arada, Cveni tel efonebi 24 saaTis ganmavl obaSi Car-Tul ia da SeuZI iAT dagvikavSirdnen. konsul taciis mi Reba aseve SesaZI ebel i internetiT.

mesame wel ia mcenareTa dacvis saSual ebebTan er-Tad bazarze „Syngenta-s bostneul is Tesl ic SemovitaneT. Semogvaqvs rogorc saTburebis, ase Ria grun-tisTvis gansazRvrul i maRaL xarisxi ani Tesl i, romel mac ukve aRi areba moi pova, rogorc xarisxi T, aseve gemuri Tvi sebebi T. bevri kul tura ukve bazar zec gabatonda, magal i Tad saTburispamidori, sazamTro.

Cven ofiSSi gvyavs, rogorc mcenareTa dacvis, aseve meTesl eobis mcodne maRaL i donis special isti, sadac fermers yvel a saWi ro informaciis mi Reba Se-uZI ia. aqvea Cveni maRazi ac, sadac Sei ZI eba Sei Zinos saWi ro produqcac.

mcenareTa saSual ebebi da Tesl ebi sezoni s dadgo-mamde, Teberval Si ve Semova saqar Tvel oSi da moTxov-

ni l ebi s mixedviT ganawi l deba regi onebSi. Cven ukve gaweril i gvaqvs gegma, romel regionSi unda Cavi deT, vis unda SevxvdeT, ra mar Tebi T gavSal oT muSaoba..

Cveni muSaobi s specifi ki dan gamomdi nar e gansakuT-rebul yuradRebas vamaxvi l ebT meRvi neobaze, mevena-xeebis xarisxi ani produqci iT momragebaze, rasac xarisxi ani, evropul i donis Rvinoebis dasamzadebl ad da am bazarze gasasvl el ad gadamwyeti mni Svnel oba aqvs, ami tom Cveni momxmarebl ebi arian: „Tel avis Rvinis marani“, kompania „xareba“, kompania „badagoni“, „Satomuxrani“. isini garantirebul ebi arian rommaRaL i xarisxi s mcenareTa dacvis saSual ebebs moi xmar en tradiciul ad Cvengan probl ema ar SeeqmnebaT.

wl eul s dagegmi l i gvaqvs sakutari sademonstracio nakveTebis gakeTeba, rodesac axal i produqcia Semodis, sanam real izaciaSi gavuSvebdeT, mas daax-I oebiT 9-10 wl iani sagamocco vada aqvs gavl il i sawarmoSsi, mxol od amis Semdeg registrirdeba da dasaSvebia real izacia. aseve mwidrod vtanamSrom-I obT sofl is meurneobi sa da sursaTis erovnul saagentosTan, mcenareTa dacvis departament Tan, romeli ic saqar Tvel oSi axal i preparatebis registracias axorciel ebs. axal i preparatebi j er sademonstracio nakveTebze icdeba, Sedegs vaCvenebT fermerebs, paral el urad saTanado dokumentacia mi ewodeba ministros, Tu rogor daregistrirde esa Tu i preparati. ase romyvel a produqti, rasac Cven momxmarebel svTavazobT, sertificirebul i, testirebul i da garantirebul ad maRaL i xarisxisaa.

#### Sps „gema“

Tbilisi, moskovi s gamz, 2 (m.sadguri „samgori“)  
tel : 079888 088, 574 74 74 64

#### Sps „agroveta“

marneul i, d. aRmaSenebl is 1. (bazris mimdebare te-  
ritoria), tel . 593328131

#### Sps „agroservisi“

q. Tel avi (qal aqSi Sesasvl el i)  
tel : 593334243, 598693131

#### Ind. mewarme „fridon di Rmel aSvi l“ sagarej o, s. giorgiwindi tel : 593982987

#### Ind. mewarme „efrem dul arize“ gurjaani, sanapiro q.9 da i. WavWavaZis 10 tel . 599 57 13 60

#### Sps „saba“

q. dedofl iswyaro, barataSvi l is q.2 tel . 599 90 36 15

#### Sps „zooagros ganvi Tarebis j gufi“

zestafoni, rusTavel is 69,  
tel : 595 760710, 760 705

#### Sps „geguTi s fermerTa momaxurebi s centri“ wyal tubo, s. geguTi, tel . 555 21 93 01, 599 96 10 99

#### Ind. mewarme „Temur ormocaze“

q. vani, rusTavel is 5, tel . 599 13 79 30, 557 35 65 65

#### Sps „neqtari“

Wi aTura, mRvi mevis q. 5 tel . 595 770 659, 790 85 37 88

#### Sps „agroal geTi“ tel . 599 60 01 31, 579 60 01 31

#### SYNGENTA AGRO SERVICES AG warmomadgeni oba ami erkavkasi i s qveynebSi :

0119.Tbilisi, akaki wereTI is 142 (di dube)  
tel /faqsi: 2353312. mob. 599506235, 592146677  
el .fosta: zurab.loladze@Syngenta.com  
komerciul i partniorebi saqar Tvel oSi

#### Sps „agrotrading pl i usi“

Tbilisi, ak.wereTI is 140a.  
tel .790001201.  
mob.: 599330763, 595 22 28 20, 59957 47 02, 555 441511  
el .fosta: agrotrading55@gmail.com

#### Sps „boran qmila“

Tbilisi, marneul is quCa 44, tel .2157575  
mob: 595954141, 599196169.  
el .fosta: l.aroshidze@borun.ge

#### Sps „agrosani“

Tbilisi, erisTavis q. 2  
tel : 599150908, 571150908, 571470618, 577499420.  
el .fosta: agrosani.ltd@gmail.com

#### syngentas produqciis SeZena aseve Segi ZI iAT Sem-deg kompaniebSi :

Sps „agroqartli“  
q.gori, cxinval is gzatzkecil i 4.  
tel . 599564304, 599511159, 599518299  
el .fosta: agroqartli.georgia@yahoo.com  
mailto:agroqartli.georgia@yahoo.com>

# saqarTvel os sasursaTo usafrTxoebis koncefcia ganvi Tarebul i qveynebis gamocdil ebis safuZvel ze unda SemuSavdes

sasofl o sameurneo miwa qveynis is ZiriTadi sawarmoo saSual ebaa, romel mac misi sasursaTo usafrTxoeba da sofl is mosaxl eobis dasaqmeba unda uzrunvel yos.

samwuxarod, saqarTvel os ministrTa kabinetma e.w. miwis reformis egi di T 1992 wl is 18 i anvis # 48 dadgeni l ebi T qveyanaSi miwis fondis dani avebas daudo saTave. Sedegad dai ngr a special i zebul i, gamsxvi-l ebul i meurneobebi, sanaSene, saTesl e, sanerge sadgurebi, aTasobi T heqtari nayofieri saxnavi miwa gaudabnovda, dawaobda da erozlam ga-anadgura.

sasofl o sameurneo produuci-  
asa da sawarmoo saSual ebebs So-  
ris fasta uTanasworoba (erTi  
tona dizel is SesaZenad 4-5 tona  
marcvl eul ia saWiro, erTi tona  
azotovani sasuqisaTvis ki – or  
tona marcvl i, xol o saSual o  
simZl avris traqtoris SesaZenad  
–150 tona marcvl i.) ganvi Tare-  
bul qveynebs aizul ebs sofl is  
meurneobas gansakuTrebil i yu-  
radReba dauTmon. aSS-bi sofl is  
meurneobaSi 30%-iT mets xarj avs,  
vidre sxva dargebSi. aseve iqceva  
yvel a saxel mwifos gonieri xel i-  
sufl eba, radgan sxvanairad sof-  
l is meurneoba ver iarsebebs.

saqarTvel os yofil maxel isuf-  
I ebam, drakonul i, dausabuTe-  
bel i sagadasaxado wnexiT da sa-  
xel mwifos mxridan Caurevl obis  
pol itikiT iqamde mi gvi yvana rom,  
qveynis marCenal i miwa, keTil dRe-  
obis uzrunvel yofis nacvl ad,  
sofl is mosaxl eobas mZime tvir-  
Tad daawa.

1989 wel s pirad sargebl obaSi  
arsebul miwaze moyvanil i mosav-  
l is 82% gl exs bazarze gahqonda.  
1998 wel s es cifri 22%-mde Sem-  
cirda. 2010 wel s ki – mxol od 18%  
Seadgenda, maSin, roca gl exis pi-  
rad sargebl obaSi arsebul i mi-  
wis farTobi am periodis Tvis uk-  
ve 0.25 ha -dan, saSual od 1 ha-mde  
iyo gazrdil i, anu miwebis kerzo  
sakuTrebaSi gadacemas, sasofl o  
sameurneo produuci is warmoebis  
zrda da gl exis keTil dReoba ar

gamouwvevia, piriqi Tbol owl ebSi  
Siga bazari mTI ianad ucxoETi dan  
Semotanil ma produqciam dai kava.

agrosektoris depresiul oba  
daetyo dargSi ganxorciel ebul  
kapdabandebebsac, romel mac qve-

pi roebis gamo 2012 wl is ivl is-  
dekemberSi mosaxl eobam ammi webis  
masobri vad gayidva dai wyo da da-  
na Saul ebrivi pol itikis wyal o-  
bi T 3000 ha-mde saukeTeso saxnavi  
miwa ucxoel ebs xel Si Cal is fasad  
CauvardaT. samwuxarod, process  
arc axal i xel isufl eba afexhebs.  
miwebis gayidvis procesi dRemde  
grZel deba.

dRes yofil i xel isufl ebis mi-  
zeziT ekonomiurad dauZl ure-  
bul i gl exi Tu fermeri oj axis,  
Svil ebis gadasarCenad miwas yi-  
dis, radgan adgil obrivebs am mi-  
wis yidvis SesaZl ebl oba ar aqvT.



yanaSi Semosul i investiciebis  
mxol od 1,8% Seadgina. gazrdis  
nacvl ad, sabWoTa periodTan Se-  
darebiT, 7-j er Semcirda Sromis  
nayofiereba. ertTi germanel i an  
pol onel i fermeri 20-30 kacs Tu  
kvebavs, qarTvel gl exs Tavis ga-  
mokvebac ver mouixerxebia.

1992-98 wl ebSi ganxorciel e-  
bul i privatizaciis Sedegad mo-  
saxl eobas sakuTrebaSi yvel aze  
nayofieri, maT Soris, sarwyavi mi-  
webi gadaeca. wl ebi s gamavl obaSi  
ammi webi dan sargebl is miuRebl o-  
bis sa da Seqmnil i mZime ekonomiuri

qarTvel i gl exi j er daubadebel  
Svil i Svil s uyidis miwas da saar-  
sebod sivrces aRar utovebs. ami-  
tomes procesi warmoebis sferos  
scdeba.

rodesac romel ime axl omxed-  
vel i finansisti dRevandel biu-  
j ets gegmav, unda Seignos, biu-  
j etis Sesavsebi gasayidi miwa qve-  
yanas aRar aqvs, rom dRes miwas  
ful is Cadebis droa.

saqarTvel os donori institu-  
tebi, miwi dan miRebul i finansebis  
sofl is meurneobis kvl awwarmoe-  
baSi gamoyenebas ar miesal mebian

da ucxoetidan mza producjiis Semotanis pol i ticas Ti Tqmisi axa- lisebdnen. aseTma cxrawl i anma experimentma sofi is meurneobis dargi qveyanaSi sabol ood daasama da mis 90-i ani wl ebis doneme de amoyvanas, Cveni gaTvl ebiT 3-4 wel iwadi amdeni ve mil iardi lari mainc daswirdeba, radgan mTel saqarTvel oSi aRsdgenia sakomuni kacio sistemebi: miwis nayofie reba da struktura, Tanamedrove teqnol ogiebi Taa mosawyobi Si da sarwyavi da sadrenaJe sistemebi (rogorc Ria ise daxuruli), aRsdgenia Si da samindvre gzebi, sadac mZime teqni kasac ki uwirs gadaadgil eba da nebis mieri Zvirad Rirebul i kombaini an traqtori erT wel iwadSi gamova mwyobridan.

Casatarebel ia miwebis rekultivacia, mosawyobia producjiis Sesanaxi sasawyobo da samacivro meurneoba, Tundac mosavl ianobis gansazRvris mizni T Casatarebel ia miwis boni tireba, Sesamci-rebel ia da zogan gasauqmebel ia miwis gadasaxadi, sarwyavi wyl is da trasaze cxvris farebis gadarekvis mosakrebel i da sxva.

daqceul sofi is meurneobaSi kap-dabandebis Cadebis da daxmarebis nacvl ad, nacmoZraobam gadasaxado wnexi Ta da sxvadasxva fandebi T finansebis gamowurva daiwo, Tumca agral ur seqtors wurbel ebi manamdec ar akl da. 1996 wl idan – 2012 wl amde saqarTvel oSi miwis gadasaxadebi T asobi T milioni lari amoRebul i. es Tanxa saqarTvel os presidentis 1996 w. 11 Tebervl is 166-e brZanebul ebiT sofi is meurneobasve unda moxmareboda, Tumca dabeji Tebi T SeiZI eba iTqvas, rom 15 wl is ganmavl obaSi respublikaSi miwis gadasaxadi T Segrovil i asobi T milioni lari, miwebis dacvisa da nayofierebis amaRI ebris RonisZiebebi sa nacvl ad: pensiebs, xel fasebs, gamgeobi sxva xarj ebs xmardeboda. mouvl el obiT ki nayofieri savargul ebi unayofo savargul ebad iqca.

viTarebis Sesacvl el ad saqarTvel os „nacional ur“ mTavr obasac araferi gaukeTebia, piriqiT, cecxl s navTi daasxa: imis magiv-



rad rom mTel qveyanaSi (savarguli ebis gamofitvis gamo) miwis gadasaxadi Seemci rebina an saer Tod gaeuqmebina (rasacaxl agpirdeba saqarTvel os premier ministri battoni bi Zina ivani Svi i), 2010 wl is 23 dekembbris 394-e dadgenil ebiT, sofi is mosaxl eobas saaxal wl o saCuqari miarTva da srul iad dasusabuTebl ad sasofi o sameurneo miwaze qonebis gadasaxadi 300-400 % -iT gauzarda, saxnav farTobezze saSual od heqtarze 30 l aridan -100 l aramde, xol o saZovarze, 2-3 l aridan – 16 l aramde, anu – 500% -ze metad. Tu gavi Tval i swinebT imasac rom 2005-2012 wl ebSi dizel is sawvavze fasi 0,80-dan, 2,5 l aramde gai zarda, xol o sasugebiisa (50 kg. tomara) – 20 l aridan – 40-80 l aramde, naTel i iqnebara radeSi Cavarda gl exi – fermeri. miwis damuSavebiisa da mosavl is movl a-moyvanis xarj ebis zrdas, marcvl eul ze fasebis mni Svnel ovani mateba ar gamouwvevia. (magali Tad 2005 wel sxorbl is Sesasyidi fasi mosavl is aRebis periodSi 28-30 TeTris, 2011-2012 wel s – 35-37 fargl ebSi meryeobda, anu fasi mxol od 25 % -iT gai zarda, maSin roca danaxarj ebma 200-300 % -iT moimata. samagierod mkveTrad gai zarda puris, xorcis da sxva produqtis fasi, anu Semosaval ma warmoebis sferodan mkveTrad gadamuSavebiisa da real izaci is seqtorSi gadai nacvl a. am sferos ki mTI ianad saxel isufl ebo kl ani akontrol ebda.

mmarTvel ma gundma yvel aferi i Rona, raTa am RonisZiebebi T ad-

gil obrivi gl exi, fermeri miwis, rogorc uZravi qonebis mfl obel i procesi dan mTI ianad gamoeTiSa, raTa qoneba ucxoel ebze advil ad mi eyida, kompaqturad daesaxl ebi-na i sini regi onebSi, mi eca maTTvis moqal aqeoba da im rai onebi dan saraCevno xmebis samudamod Tavis sasar gebl od gaenaRdebi na.

dRes saqarTvel os saxel mwi fos winaSe uaRresad mni Svnel ovani amocana dgas. unda SemuSavdes qveynis sasursaTo usafrTxoebis koncefcia, gani szazRvros sursaTze moTxovni da Cveni agrosektoris mier misi dakmayofil ebiS SesaZI ebl obis parametrebi.

maqsimal uri Zal isxmeava saWi-ro, raTa marcvl eul sa da sxva Ziri Tadi produqtебi T nawil obriv mainc daakmayofili os qveynis moTxovna, radgan msofl io sasursaTo bazarze probl emebis warmoqmnis SemTxvevaSi, misaReb fasad, Siga bazris sursaTiT uzrunvel yofamoxerxdes.

saxel mwi fom unda izrunos qveyanaSi Tanamedrove teqnol ogiebisa da masTan mibmul i komponentebis danergvisTvis, Cveni axal-gazrdobi s ganaTI ebis donis, maT Soris sazRvargareTis universitetebiS, amaRI ebisTvis, da aram sursaTis SemotanisTvis, ris warmoebis saSual ebas Cveni miwa-wyali i iZI eva. unda gauqmdes saeqsporto gadasaxadi. yvel a danar Ceni Ziri Tadi produqtis warmoeba dafinansdes qveynis sasursaTo usafrTxoebis programis fargl ebSi, rogorc amas ganvi Tarebul i qveynebi akeTeben.



evrokavSiri sofl is meurneobis subsidierebam 1992 wl i dan biuj eti 49% Seadgina. aq fermerebis warmoebul i sasaqonl o producii 45-50%-s faqtobrivid biuj eti afinansebs.

zogiert qveyanaSi sofl is meurneobis subsidiereba (nakl ebadiacul i qveynebis bazarze SeRwevis da sawyis etapze dabal fassiani producii T damkvidrebis mi zni T) qveyanaSi warmoebul i sa-sofl o-sameurneo producii sabazro Rirebul ebas 1,5-2- j er aRemateba. es saki Txi saxel mwi-fosgan gansakuTrebil yuradRebas moi Txovs!

amvarad, unda daveTanzmoT mo-sazrebas, rom im qveynebSi, rom I ebic dRes msofl io agrarul bazarze Ziri Tadi miwodebl ebi arian (a S S, kanada, evrokavSiri), saxel mwifo mxardaweris programbeba gadamwyeti rol i Seasru-I a.

dedamiwi s mosaxl eobis gl obaI uri zrda, biosawvavze gadasvI a, savargul ebis degradacia da sxva uaryofiTi faqtorebi marcvI eul i kul turebis warmoebas amcierebs da mTel msofl i oSi sur-satze fasebis matebas iwevs. es procesi ki dev ufro gammawdeba, radgan dedamiwaze 2007-2009 wl e-bis monacemebi T, eroziis, dawao-bebis da daml aSebis gamo 8 mil i-oni ha. savargul i gamousadegari gaxda. marto Crdil o CineTSi boI o wl ebSi sarwyavi farTobebis gaudabnovebis mizezi T yofil i

marcvl is mwarmoebel i raionebi-dan 24 aTasi sofel i aiyara. i give tendenciaa mraval mil ionian indeoTSi. hidrol ogiuri reJimebis gauaresebis Sedegad, bevr qveyanaSi (saudis arabeTi, siria, erayi, iemeni), sadac mel ioracia miwiskeSa Wa-burRil ebze iyo damyarebul i, wyl i done mkveTrad daeca. arabeTs he-ze 60 centneri marcvl i mohyavda. qveyana marcvl eu-l is warmoebas, zemoT mocemul i mizezebis gamo, saer Tod wyvets. es msofl io bazarze damatebi T 10 milioni (xorbal i 3 milioni, qeri 7 milioni) tonamarcvl is moTxovnaswarmoSobs. ganvi Tarebul qveynebSi rezervi Ti TqmisaRar arse-bobs. iaponiaSi brinj is mosaval i 2005 wl i dan erT donezea da ha-ze 52 centners Seadgens. evropaSi c marcvl is warmoebis mxrivaseTi ve mdgomareobaa. safrangeTSi ha-ze mosavl ianoba Seadgens 70-72 centners. germaniaSi – 58 centners. zeda zRvari miRweul ia rzis warmoebas (10000 l i tri erT Zroxaze), Rorebis wonamatSi, qaTmebis kvercxdebaSi ... es niSnabs rom ganvi Tarebul qveynebSi sasofl o sameurneo producii warmoebis gafarTovebas veRar SeZl e-ben, ukeTes SemTxvevaSi am dones SeinarCuneben. mosavl is zrdis potencial i aqvT Cvennair ganvi-Tarebad qveynebs, magram dRemde Cvens mTavrobas es saki Txi ar ainteresebda.

zemoaRniSnul i gl obal uri saf-rTxeobi, ris Sedegadac SeiZl eba

mosavl i anobankveTrad Semci rdes da qveyni sasursa To usaf rTxoe-ba ri skis wiNaSe dadges, (romel ic aranakl eb saSi Si a vi dre samxedro agresia), ai Zul ebs ganvi Tarebul qveynebs sofl is meurneobis dasafinansebl ad didi xarj ebi gai-Ron. evrokavSiris erTiani sasofl o sameurneo pol itika [Common Agricultural Policy] pirdapi r subsidierebis, fasebis mxardaweris Tu sxva saSual ebi T, im miwebis aTvis-sebasac i Tval i swinebs, romel Ta damuSavebac SesaZl ebel ia. evrokavSiris biuj etSi sofl is meurneobaze 40-45 mil iardi evra gaTval i swinebul i, roml is didi nawi l i, 11 mil ioni fermeris dotaciaze ixarj eba. faqtobrivid evrokavSiri Tavis Zvel qveynebs erT Zroxaze dReSi 2 evros uxdis. 11 mil iardi evroTi subsidierdeba marcvl is warmoeba, 2 mil iardi evroTi – zei Tunisa da sxva.

erTiani evropis sasofl o-sameurneo pol itika amaTu im fermers garkveiT aval ebs ra da ramdeni unda awarmoon.zogierTi saxis saqonel ze moTxovna miwodebis bal ansis dar Rvevisa da fasis mkveTri Semci rebis Tavidan asacil ebl ad (Warbwarmoeba) j er kidev 90- i anwl ebSi, fermers mart o warmoebul produciae ki ara, im saqonel zec dauweses anazRau-reba, romel ic ar uwarmoebia: Tu fermerma miwa daasvena an saqonl is sul adoba Seamcira,-saxel mwi fodan i Rebs kompensacias.

garkveul i kul turebis: pomidvris, Jol os, I udis warmoebisaTvis vargiSi qeris, mecxovel eobi-saTvis saWi ro sakvebi bal axebis da sxva warmoebis gazaras EC-i programebi T axal i sebs. programmaSi monawil eobis mi Reba SeuZl ia yvel a fermers. i gi avsebs martivi tipis ganaxads, romel ic biznes gegmas waagavs, sadac Camoi Tvl eba finansuri da teqnikuri saSual e-bebi, warmoebis moclubis monacemebi. rogorc wesi 100%-ian da-finansebas veravinver i Rebs. fermeri val debul ia 40-50% Tvi Ton daafinansos proeqti.

aRsani Snavia, rom evrokavSiris qveynebSi fermerul i meurneobebi 10-20 heqtar farTobzea ganTavsebul i. 50 heqtrian meurneobebi

mxol od 10%-s Seadgens, maSin ro-caamerikul i fermebis naxevars 50 ha-ze meti miwa aqvs.

meurneobis efektianobis mxriv sasofl o-sameurneo miwis far-Tobi (optimal ur sidi demde) mni-Svnel ovan rol s ar asrul ebs, mTavaria maRal i energoarWurvi-loba, Tanamedrove teqnol ogiebi da warmoebul i produqtis realizacia, raSic saxel mwifos gadamwyeti rol i uWiravs, radgan gafarTovebul i kvl awwarmoebis procesis marTva garedan daxmreibis gareSe SeuZl ebel ia.

agrarul ad ganviTarebul qveynebSi moqmedebs, rogorc pirdapiri saxel mwifo kompensacia-danamati, rac gamoxateba stiqiuri ubedurebiT miyenebul i zianis anazRaurebiT, saTesi farTobe-bis SemcirebiT, saqonl is izul ebiT dakvl iT da aS., ise arapirdapiri saxel mwifo regul ireba, rac iTval i swinebs sursaTis bazarze kvotebis tarifebSi Carevas, eqsport-import ze gadasaxadebis da-wesebas, danaxarj ebis: sasuqebis, Sxamqi mi katebis, cxovel is sakvebis, kreditebis procentis, dazR-vevis gadaxdis kompensacias, produqciis Senaxvi da transportirebis subsidirebas da sxva;

saxel mwifo mxars uWers sawarmoo infrastrukturis ganviTarebas, maT Soris xangrZl iv sub-sidirebas, romel ic gamoiyeneba sairigacio proeqtebis dasafinansebl ad, miwebis rekul tivaci-is CasatarebI ad, fermerTa gaer-Tianebebis Sesaqmnel ad.

saxel mwifo, subsidiebis sistemi, did adgil s ikavebs fasebis mxardaweris programebi.

amerikis SeerTebul i StatebSi saxel mwifo mxardawerit fasebis, gasaRebis dakreditebis, miwis dacvis, saerTaSoriso valro-bis, uaRresad qmediTi mobil uri programebi moqmedebs, roml ebic agrosamrewvel o kompl eqsis yevI a monawil is, gansakuTrebit ki mwarmoebl is, mZl avr material ur dainteresebas uzrunvel yofs.

am saqmes aSS-Si oTxI uwyeba uZR-veba, romel Sic umTavresi rol i sofl is meurneobis departaments ekisreba. aq sofl is meurneobis produqciaze ori saxis fasebi

arsebobs: miznobrivi garantebi, romel ic yvel a mniSvnel ovan sa-sofl o sameurneo produqciaze vrcel deba. igi ise gaTvl il i, rom saSual o da dabal Semosav-Iani fermis TviTdafinanseba uzrunvel yos. am dros fermeris produqciis realizacia xorci-el deba sabazro fasiT, romel ic SeiZl eba iyos maRal i, dabal i an miznobrivi fasis tol i. wl is bo-l os an svadros fermeri miznobrivi fassa da sareal izacio fass Soris sxvaobas i Rebs. Tu sarealizacio fasi dabal ia, am SemTx-vevaSi, fermeri saxel mwifosagan miznobrivi (garantirebul ) fass i Rebs.

sagiravno fasi: am (fiqsirebuli) fasiT fermeri moweul produqciastI i anad sasaqonl o sakreditokorporacias giraoSi abarebs. im SemTxvevaSi Tu sabazro fasebi sagiravno fasze dabal ia, fermeri 9 Tvis ganmavl obaSi Ta-visi produqciis gamosyidva SeuZl ia, Tu ar gamoisyida i gi gadadis korporaciis sakuTrebaSi, xol o fermeri sagiravno fasis fargIebSi, Senaxvi xarj ebis gamoki ebiT, ful ad kompensacias i Rebs, evropis qveynebSi garantirebuli fasebis meqanizmi yvel a sasofl o sameurneo produqciaze moqmedebs. fineTSi sami saxis fasia: miznobrivi, dotaciuri da dama-tebIi. yovel wl i urad fineTis sofl is meurneobis satyeo saministro (erTi sistema) miznobrivi fasebs sazRvrafs da sasofl o

sameurneo saqonl is mwarmoebel - Ta central ur organizacias Tanxmebs. es fasi wl is ganmavl o-baSi inflaciis gaTval i swinebiT SeiZl eba Seicval os. miznobrivi fasis bazisad aRebul ia model i, romel ic damuSavebul ia samxre-Tis raionebis (ukeTesi sawarmoo pirobabis) warmoebis TviTRirebul ebis model idan. cudi pirobabis mqone raionebi saTvis gaTval i swinebul ia dotaciuri fasebi. Tu produqciis Rirebul eba dotaciur fass gadaWarbebs, zaral s fermers ar unazRaureben. dotaciuri fasebi aseve gaTval i swinebul ia saeqsporto produqciaze.

akademikos nodar WiTanas gamokvl evebiT saqarTvel os samomavl od sasursaTo produqtebis didi deficit Seeqmneba da roml is Sesavsebad mniSvnel ovani salval uto resursi gaxdeba saWiro, es dro ukve dadga Cveni qveyana saarsebo produqtis did nawil s sazRvargareT yidul obs.

agrarul sferosi msofl io qveynebis gamocdil ebis gaTval i swinebiT unda SemuSavdes saqarTvel os sasursaTo usafrTxebis koncefcia.

saxel mwifo daxmarebebis programebi dan unda avi RoT Cveni qvey-nisaTvis gamosadegi model i da daviwoT brZol a qveynis gadasarCenad.

**Tamaz burdul aze  
sofl is meurneobis  
mecnierebaTa doqtori**





# Cxovel Ta saZovrul i Senaxvis perspektivebi saqarTvel oSi

adami anis srul fasovani cxovrebis gamsazRvrel faqtoraTa Soris mecxovel eobis produqtебi Tuzrunvel yofas udi desi mni Svnel oba aqvs. mecxovel eobis aRmavil obis erT-erT ZiriTad da gadamwyet material ur safuZvel s sakvebi warmoadgens. saqarTvel oSi, sadac sakvebi kul turebis saTvis saxnavi miwebi s gamoyenebi s Sesazi ebl oba SezRudul ia, sakvebis warmoebis ZiriTad saSual ebad bunebriv sakveb savargul ebi rceba.

Tanamedroves msolfios ganvi Tarbul i mecxovel eobis qveynebSi far Tod gamoyeneba mTel i wl is manZil ze msxvil fexa rgosani prutyvis baguri an saZovrul -baguri Senaxvis sistema. saZovrul -baguri Senaxvis sistemis dros zafxul is periodSi sakvebis ZiriTad wyaros bunebrivi, an naTe si saZovrebi warmoadgens. magram mecxovel eobis intensifikasiis, rZisa da xorcis warmoebis samrewel o safuZvl ebze gadasvl is principebi dangomdinare, xSi rad uars amboben naxi rissaZovrul Senaxvaze, ris erT-erT mizezad safuraje marcvl eul is Sedarebi T dabal fasebs da sakvebi kul turebi s mosavl i anobi s gadi debi s Sesazi ebl obebs asaxel eben. am SemTxvevaSi merZeul i da suqebazve myofi cxovel is standartul i ul ufis safuZvel s warmoadgens marcvl eul i, wnniani da uxeSi sakvebi.

unda gvaxsovdes, rom cxovel - Ta saZovrul i Senaxvis pirobebSi kul turul sarwyav saZovrebs, ganoyierebisa da racional uri gamoyenebis Sedegad, warmatebi T SeuZl ia konkurenca gauwi os sakvebwarmoebis sxva mimarTul ebebs. Tanamedroves moTxovnaTa pirobebSi fermers gamocdil eba un-

da qondes da uaxl oes meTodebs fl obdes, rom Tavisi warmoeba ukeT marTos. saZovrul i meurneobis gaZRol is meTodebi Rrma codnis garda ufrimoqnil i unda iyo s da uaxl oesi teqnol ogiebis danergvaze droul ad reagirebdes vidre es sakvebi kul turebis motibul i masiT cxovel is kvebas gul isxmobs.

saZovrul i Senaxvis erT-erT mni Svnel ovan upiratesobas saZovrul i xovel Ta sufTa haerze yofna, SeuzRudavi moZraoba warmoadgens, rac mastimul irebl ad moqmedebs cxovel is organizmis fiziol ogiur funcciebze, xel s uwyoobs maT normal ur zrda-ganvi Tarebas, cxovel moqmedebs gaZli ierebas, sasi cocxl oprocesebis regul acias da mis mimdinareobas, aaqtiurebs sisxl is mimoqcevas, nivTierebaTa cvl as, curis kvebas, sxvadasxva daavadebebis mimarT organizmis gamZl eobas, amaRI ebs saerTo rezistentobas, ukeT amJ-Ravnebs da iyenebs genetikur potencial s. yovel i veaRni Snul i dan gamomdinare mcirdeba berwianoba da Sesabamisad matul obs namatis mi Reba, izrdeba j ansaRi mozardi, iqmeba yvel a piroba misi intensuri zrdisa damaRal i produqtium.

I obis misaRebad. saZovarze namyofi pirotyvi SemdgomSi ukeT i tans zamTris baguri Senaxvis dros mwi-ri kvebis pirobebs.

cnobil ia, rom saZovarze miRebul i 1 kg 4% cximianobis rZis warmoebaze gacil ebiT nakl ebi sakvebi erTeul i ixarj eba (0,7-dan 1,5-mde), vidre baguri kvebisas (1,1-1,9-mde). furis saZovrul Senaxvaze gadasvl isas rZeSi 20-22 mg-dan 34-36 mg-mde i zrdeba amnomJavebis raodenoba, aseve si sxI Si matul obs hemogl obinisa da kal ci umis mocol oba.

saZovrul i bal axnaris normaluri movl a-moyvanisa da gamoyenebis pirobebSi xasiaTdeba maral i yuaTianobi T. ase mag. 100 kg. saSual o xarisxis bunebrivi saZovris bal axi (mSral masaze gadayvaniT) 65 sakveberTeul s da 6,5 kg monel ebad proteins Seicavs. mwvane bal axi 10-jer met kartoins Seicavs, vidre Tiva. didi raodenobi Taa masSi Δ vitamini, romel sac antiraqtul i Tvis sebebi T gamoirCeva, vitamini Csuravandis (cingsi) sawinaaRmdego moxmedebi T, xol o E vitamini gamravl ebi s uwyoobs xel s da a.S.

saZovrul periodSi mkveTred mcirdeba kombinirebul sakvebebs moTxovni l eba, an umetes SemTxvevaSi saer Tod aRaraa saWi ro. aseve gamoTi Sul ia danaxarj ebi mwvane masis motibvaze, transportirebaze, sakvebis darigebaze, nakel is gatanaze, rac cxadia, amcirebs produqciis Tvis TRirebul ebas.

saZovrul i sakvebis maRal i yuaTi-anoba, srul fasovneba da umetes SemTxvevaSi cxovel i smaqsimal uri produqtul obis mi RwevisaTvis saWi ro ni vTierebebi T dabal anseba saZovrul i Senaxvis dros maRal wvel adobas da wonamats, mecxovel eobis produqtibis war moebis matabas ganapi robebs. SemTxvevi Ti ar aris, rom saZovrul periodSi rZis wl iuri warmoebis 60-70% mi i Reba, mxvil fexasaqonl isa da cxvrissu-qebaze Cveul ebriTan SedarebiT nakl ebi ixarj eba.

Cxovel is saZovrul i Senaxvis uaryofiT mxared bal axnaris na-wil is gadaTel visa da nakel iT dabinZurebis gamo saZovris produqtul obis ramdenadme Semcireba SeiZI eba Cai Tval os. mxedvel obaSia misaRebi cxovel is mier saZovarze gadaadgil ebis, morekva-garekvaza da gadarekvaze gaweul i SedarebiT gazrdil i energetikul i danaxarj ebi, roml ebic bagurs mni Svenel ovnad aRemateba. energiis es danaxarj i, 500 kg wonis furis SemTxvevaSi, erT km. man-Zil ze gadarekvis dros 1 kg. rZis warmosaqmnel ad gaweul i energiis eqvival enturia. garkveul xarj ebTanaa dakavSi rebul i cxovel is saZovarze Senaxvi saTvis saWi ro na-gebobis, fardul ebis mSenebl oba, sarwyul ebel i adgil ebis mowyoba. cxovel is kul turul saZovarze Senaxva sakmaod did SromiT da material ur danaxarj ebs moi Txovs. regul irebul i Zovebis organi-zaciisaTvis (nakveTebis SeRobva, el eqtromwyemis gadatana, gzebis gayvana da movl a, gaZovebis Semdeg darCenil i bal axis waTiba, nakeli i gafantva da ssv.).

baguri Senaxvis erT-erT mTavar upiratesobas saZovrul Tan SedarebiT warmoadgens misi organiza-cii ramdenadme ufro simartive, Tanamedrove meqanizaciis piro-bebis. Senaxvis am istemis dros mecxovel eobis produqciis gamo-saval i sakvebi farTobi erTeul -ze gadaangari SebiT aRemateba saZovris, Tumca es matebaver faravs mwvane masis moTibva-transporti-reba-darigebis da nakel is utili-zaciis xarj ebs. gaadvil ebul ia veterinarul i mom saxureoba, Ti T-qmis gamorixkul ia cxovel is da-avadeba timpanitiT da ssv. gasaTval i swinebel ia isic, rom msxvil fexa r qosani cxovel is maRal i koncentraciis dros Senaxvis mxo-l od baguri sistemis gamoyenebaa

mi zanSewoni l i, radgan saZovrul i Senaxva am SemTxvevaSi praqtku-l ad metad gaZnel ebul ia magram aseve unda gavi Tval i swinoT, rom merZeul meZroxebaSi da gansakuTrebiT sanaSene meurneobebSi (fermebSi), sadac ki amiS SesaZI ebl i obaarsebobs, zafxul Si saZovarze naxiris Tundac ramdenime saa-TiT gayvanas uaRresad dadebiTi Sedegebi aqvs. amiSaTvis sakmarisia 0,1 ha-ze nakl ebi kul turul i saZovari erT furze, anu 200 sul ian fermaSi 20 ha maRal produqtul i saZovari bal axnaris racional uri gamoyenebis wesebis zusti dacviT. saWi ro aRini Snos, rom cxovel is ra bunebriv pirobebis Senaxvis So-reul i Sedegebis gaTval i swineba aucil ebel s xdis sanaSeno muSao-baSi, aseve merZeul fermebSi, baris zonaSicki zafxul is periodSi naxiris da pirvel rigSi make fur-ebis cota xniT mainc saZovarze yofnis da mocionis did mi zanSe-wonil obas.

baguri Senaxvis nakl ovan mxare-ebis Soris unda aRini Snos mecxovel eobis produqciis ufro maRa-l i TviTRirebul eba da erT sul cxovel ze gadaangari SebiT maTi ramdenadme mcire warmoeba, vidre saZovrul i Senaxvisas. baguri Senaxvis efekturobamTI i anad damo-ki debul i amwvane sakvebis sakvebu-ramde (moTibva-transportireba-darigebis) mitanis yvel a procesi skompl egsur meqanizaciaze, misi Semadgenel i rgol is urTiertSe-Tanxmebul da Seuferxebel muSao-baze, rac xSi rad (uamindoba, same-urneo xasi aTis sxvadasxva Sefer-xebi da a.S.) gaZnel ebul ia. bagaze cxovel is kvebisas saZovarze yofnasTan SedarebiT ramdenadme

rTul probl emas warmoadgens sakvebis dabal anseba da optimaluri ul ufiS Sedgena.

Cxovel Ta cal keul i saxeobis baguri da saZovrul i Senaxvis SedarebiTi efekturobis Seswavl is Sedegebi ar iZI eva erTmn Svenel ovan pasuxs. amasTan erTad, ufro aSkara d aris gamoxatul i furebis da cxvris Senaxvis, agreTve Zroxeyul is mozardis suqebis ekonomi kuri upiratesoba mTis bunebriv saZovrebze. baris zonaSi msxvil fexa r qosani pirutyvis mozardis suqe-bis am saki Txs ar aqvs principu-l i mni Svenel oba da misi gadawyeta unda ganisazRvros i seti faqto-rebiT, rogori caa sakvebis warmoebis, Semzadebis da sxva sawarmoo procesebis meqanizaciis doniT, sakvebwarmoebis sameurneo, ekonomikuri da organizaciul i pirobebiT, sul adobis koncentraciit. baris zonaSi zafxul Si msxvil fexa r qosani cxovel is aTvis fermis axl os aucil ebel ia Seiqmnas na-Tesi maRal produqtul i sakvebi savargul ebi, xol o maTi saZovrad Tu saTibad gamoyenebis da mwvane masiT cxovel is kvebis saki Txi unda gadawydes sakvebwarmoebis kval ificirebul i special istis mier adgil obrivi pirobebis Sesabamisad da detaluri anal izis safuZvel ze. amasTan metad sasur-vel ia baguri Senaxvis pirobebis cki gamoyenebul i iyoS cxovel i ssazovarze yofnis minimaluri saSu-al ebac. cdebiT dadgenil ia, rom furis saSual o dRe-Ramuri wvel adoba saZovarze, koncentrireibul i sakvebis gareSe Seadgens 18,6 kg rZes, bagaze TiviT kvebisas 14 kg; mcire raodenobiT koncentrat-is mi cemis es maCvenebi ebi iz-



rdeba-saZovarze 22 da bagaze kvebisas 18 kg-mde. baguri Senaxvisas rZis monawvel i ramdenadme metia saZovrul Tan SedarebiT mxol od koncentrirebul i sakvebis gazar-dil i micemisa.

ekonomikuri da zogad-biol o-giuri xasiaTis argumentebi aSkarad mowmobs merZeul i da suqebazemyofi msxvili fexa rqosani cxovel i is saZovrul i Senaxvis sasargeb-I od, Tumca ar gamori cxavs mTe-l i wl is ganmavl obaSi cxovel is

baguri Senaxvis pirobebSi rZisa daxorcisefeqturi warmoebis Se-saZI ebl obas.

saZovrul i Senaxva da masTan dakovSi rebul i saZovris racional ur-i gamoyeneba cxovel is dadebiT moqmedebas Taner Tad ganapi robebs asevebal axnaris optimal ur ganvi-Tarebas da maRal produqtul obas. swored cxovel is da bal axis moTxovnaTa srul i gaTval i swinebiT aris Sesazi ebel i saZovris swori gamoyenebis safuzvl ebis

damkvidreba. es ki Tavis mxriv ba-l axnaris maqsimal uri mosavl ianobis mi Rebisa da mecxovel eobis yvel a dargis maRal i produqtul obis mi Rwevis mTavar pirobas warmoadgens.

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## 80 გუთა 2013 წელი

## kandis naWerma SeiZI eba futkris oj axi ixsnas

kandi naturaluri Tafl is, an inversirebul i si-rofisa da Saqriss pudrisgan momzadebul i comia, romel sac, misi Tvis ebis gasaumj obesebl ad, sxvadaxva minarevebs umateben, ukanasknel xans, mefut-kreebi did yuradRebas aqceven kandis momzadebas, rac futkris Txevad sakveb Tan SedarebiT, misi mraval i upiratesobi Taa ganpi robebul i.

– kandis micema futkris Tvis dRe-Ramis an sezonis nebis mi er dros SeiZI eba, radgan i s ar iwevs futkris aRel vebas, qurdobas da sxva uaryofiT Se-degebs, rac Txevadi sakvebis – Saqrissi rofis micemas axiasiTebs;

– kands futkari mTI i anad i yenebs sakuTar sakvebad da maragad ar inaxavs;

– futkris Tvis kandis micema ar moi Txovs Sromisa da drois did danaxarj s;

– kandSi advil ia sakvebdanamatebis, vitamini nebis, fermentebis, stimul atorebis, samkurnal o preparatebis CarTva;

– momzadebul i kandi vargisia ramdenime Tvis ganmavl obaSi, maSin roca Saqrissi rofis mxol od 3-4 dRis gammavl obaSi SeiZI eba gamovi yenoT.

kandis gamoyenebas special istebi urCeVen Semdeg SemTxvevebSi:

– roca raime mizezis gamo ver xerxeba futkris maRal xarisxovani Tafl iT momarageba sazamTrod, sirofis micema ki dagvianebul ia;

– sazamTrod, normal urad momaragebul i futkris oj axebis SemTxvevaSi ki, roca Semodgoma-zamTris pirvel i naxevari Tbil ia, futkari aqtiuria, met sak-

vebs xarj avs, CarCoebze deda futkari intensiurad debs kvercxs. zamTris meore naxevari civia, futkari kravsgundas uTafl o CarCoebze, dabali temperaturis gamo ki gverdiT, Tafl i an CarCoze gadasvl a ar SeuZI ia da i Rupeba; maSin, roca skaSi Tafl is maragi SeiZI eba sakmao i yos. aseT pirobebSi 0,5-1 kg kandis naWerma SeiZI eba kargi oj axi daRupvisgan ixsnas;

– deda futkrebis gamoyvani sas, ZiriTad sakvebad mcirezomi an nukl eusebSi, roca sakvebi s damouki debiI ad Sevseba mcireoj axs ar SeuZI ia, Saqrissi rofis ki provocirebas uwevs qurdobis ganvi Tarebas;

– deda futkris gadagzavnias gal i ebiT, aseve, uCarCoo paketebiT futkris oj axebis gadagzavnias;

– futkris sakvebad wl i nebis mi er dros;

– futkris samkurnal od aqtiur da, gansakuTrebiT, mosvenebis periodSi, roca daavadebul i oj axi aRmoaCineT; gvian, roca sirofis Sereul i preparatebis micema ukve aRar SeiZI eba – am SemTxvevaSi i yeneben samkurnal o kands, romel Sic Sereul ia Sesabamisi samkurnal o preparati;

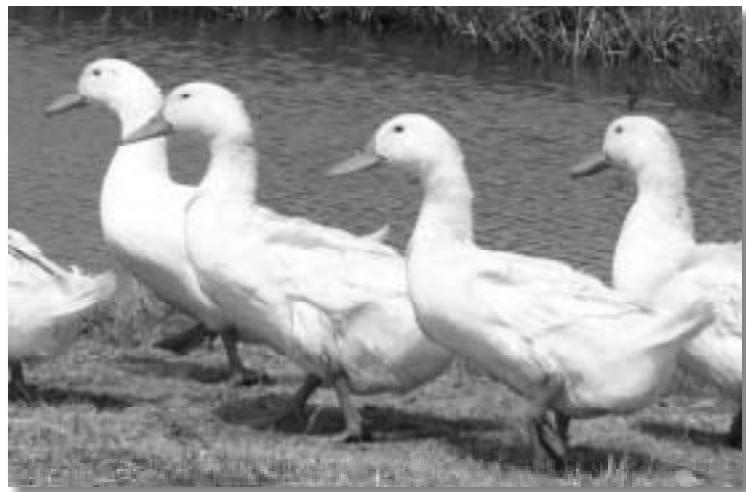
rogorc xedavT, Txevad sakveb Tan SedarebiT, kands mraval i upiratesoba gaaCnia, magram arsebobs garkveul i siZnel eebi c 1-2 kg-ze meti raodenobis misi momzadeba xel iT (mozel a) Zal i an Sromatevadia; natural ur Tafl ze momzadebul i kandi Zviria, Tanac yovel Tvis ar arsebobs daavadebebi sgan garantirebul ad Tavisufal i Tafl i sakmao raodenoba.

pirvel i siZnel i gadasawrel ad, did safutkreebSi da samrewel o sawarmoebSi i yeneben el eqtrocmisszel aggregatebs. meore siZnel i gadasawrel ad ki, Tafl s Caanacvl eben inversirebul i sirofis i seve advili ad inel ebs, rogorc Tafl s. garda amisa, inversirebul i sirofis Tavisufal ia sxvadaxva daavadebis gamomvvebi sgan. Saqrissi rofis invertirebis mraval metodTagan, kandis dasamzadebl ad saukenes gamogameli niCukis metodi, romel ic dabali temperatura-zenaturaluri Tafl i fermentebis saSual ebiT Saqrrebis inversias i Tval i swinebs. am metodiT damzadebul i inversirebul i sirofis ar Sei cavs futkris Tvis damRupvel Senaer Tebs, rac, damaxasi aTebel ia Saqriss organul i mJavebiT i nversiis dros.



# pekinuri

## i XVI



msofl i oSi, amJamad, cnobili i xvis mralval i j iSi, romel ic sxvadas-xva qveyanaSi da gansxvavebul kl imatur pirobebSi a gamoyvanil i. xvis gamoyvanil i, kul turul i j iSebi maRai i aRwarmoebis unariT, adreu- l obiT da kargi kvercxmdebl obiT xasiatDebian. sameurneo Tvis sebe- bis mixedviT xvis j iSebi iyofian: mexorcui, mexorcui -mekvercxul, mekvercxul da dekoratiul j iSebad. dasaxel ebul i j iSebidan gansa- kuTrebit didi gavrcel eba mexorcui i mimarTul ebis pekinurma ix- ma hpova. es j iSi Cvens qveyanaSic farTod aris gavrcel ebul i. 70-i an 80-i an wl ebSi pekinur ixs saqarTvel oSi samrewel o safuzvl ebze special ur ixs fermebSi aSenebdnen. Semdeg ganvi Tarebul i cnobili i movl enebis Sedegad es fermebi mTl i anad dai xura da amJamad am j iSiS moSeneba warmatebiT aris SesaZl ebel i sakarmidamo tipis fermerul meurneobebSi.

pekinuri ixvi Cinuri warmoSobi- saa. istoriul i wyaroebis Tanax- mad i gi, rogorc j iSi, sami sau- kuni s wi naT, pekinis samxreT nawi l Si gamoi yvanes. evropasa da amerikaSi XIX saukuneSi gadai yvanes. yvel gan Camoyal ibda rogorc saukeTeso mexorcui i j iSi, romel sac axasi- aTebs didi mal mwi fadoba da xor- cis maRai i xaarisxi. saqarTvel o- Si gasul i saukenis dasawyisSi Se- moi yvanes.

pekinuri ixvi TeTri ferisaa, damaxasiaTebel ia farTe, grZel i da Rrma sxeul i, kargad ganviTa- rebul i mkerdiT; farTe, brtye- l i, saSual o sigrzis Tavi, kiseri xorciiani; ganieri da grZel i zur- gi; niskarti moyvit Tal o-narinj isferi, saSual o sigrzis, odnav CaRunul i; mowi Tal o-narinj is- feri, saSual o simaRI is fexebi; sxeul ze mkvrivad ganl agebul i patara zomis frTebi. zrdasrul i ixvis coxal i masa dedl is 3,0-3,6 kg-ia; maml is 3,5-4,0 kg. erT cikl - ze kvercxmdebl oba 100-140 cal ia. Seswavl il ia, rom kargi kveba-movl i s pirobebSi meore wel s kvercx-

mdebl oba ar mcirdeba da zogier- Ti egzempl ari wl is ganmavl obaSi 200 cal kvercxsiZl eva. kvercxsi saSual o masa 85 g-ia. WuWul s axa- siaTebs zrdis siswrafe da 50-55 dRi s asakSi, aRweven 2,7-3,0 kg-mde. xorci maRai i xarisxi saa. pekinuri ixvi amtania, ar saWi roebs wyal sa- tevebs da ami tom advil ad egueba intensiur gamozr dasa da Senaxvas.

ixvebi gamoirCevian mal mwifado- dobiT, sakvebi sadmi nakl ebi mom- Txovnel obiT da gamZl eobiT. i si- ni TavianT coxal masas 7 kviris asaki s Tvis zrdian 55-60-j er da 1 kg wonamat ze 2,7-2,9 kg sakvebs xar- j aven. ixvis gamozrda SesaZl ebe- l i a rogorc intensiuri, aseve eqstensiuri Senaxvis pirobebSi. fermerul i meurneobis pirobeb- Si ixvis Senaxva umj obesiamsubuqi tipis safrinvel eSi tbis, wyal - sacavis, an mdinaris napirze. kar- gi adaptaciis unari xel s uwyobs ixvis moSenebas sxvadasxva kl imatur zonaSi. zrdis maRai i tempi ganpi robebul ia gaZl ierebul i ni vTi erebaTa cvl iT da Jangbadze didi momTxovnel obiT.

ixvi maRai i aRwarmoebis unariT gamoirCeva – es aris xangrZl ivi da intensiuri kvercxmdebl oba. normal uri kveba-movl is piro- bebSi misganwl is mTel i periodis ganmavl obaSi SesaZl ebel i a mi vi- RoT mozardi.

ixvs sxva frinvel ebi sgan gansx- vavebiT, gaaCnia SedarebiT mokl e nawl avi, ami tom sakvebi saWml is momnel ebel traqtSi advil ad gadis da yovndebea SedarebiT mcire xniT – daaxl oebiT 1,5-2 sT-i s gan- mavl obaSi. maT sakvebis monel e- badoba ufro maRai i aqvT, vidre sxva frinvel ebs.

ixvis mozardis gamozrda yve- l aze sapasuxi smgebl oa, radganac ixvs aqvs midrekil eba gadasu- qebi sken, an naadrevi sqesobrivi momwi febi sken. sanaSene mozardis mi Reba sasurvel ia moxdes 8 Tvis asaki s sadede gundi dan, rode- sac sainkubacio kvercxsi masa ar i qneba 75 g-ze nakl ebi. erTdRian asakSi awarmoeben sqesze gadar- Cevas, roml is teqnikac Semdegia: ixvs iyanen marcxena xel isgul ze zurgiT xel isgul isken da frTxi- l ad xsni ankl oakas. Tu mamrobiTi sqesi akl oakis i orwovan garsze Seini Sneba patara bortvaki, rac mdedrobiT sqess ar axasiaTebs. daxarisxebis sizuste 98%-ia. sanaSene mozards zrdian 26 kviris asakamde, Semdeg gadahayavT mSo- bel Ta gundSi. muSkiani ixvis sa- remonto mozardis gamozrda asawmoeben 10-11 kviris asakamde.

pekinuri ixvis sanaSene mozardis mamal i 6 kviris asakSi unda iwoni des 3,0 kg-s, xol o dedal i 2,8 kg-s. muSkiani ixvis mamal i 11



kviris asakSi unda i wonides 3,6-3,9 kg-s, dedal i – 2,8-3,0 kg-s. sakvebi fronti 1 frTaze 9 sm-ia, xol o darwyul ebis fronti – 7 sm. sanaSene mozardis gamosazrdel ad safrinvel eSi dacul i unda i yos Semdegi mikrokl imati: optimal u-ri temperatura +18-20°C, SefardebiTi tenianoba 70 %, zamTarSi 80%. auciil ebel ia kontrol i gae-wei os mavne ainebis Semcvel obas haerSi. dasmis simWi drove unda Seadgences 2,5 frTaze 1 m2-ze. gana-Tebis reJimi ki Semdegia: pirvel i 1 kvira 24 saatiani ganaTeba, 6 kviris asakamde xangrZI i obamci deba 9 sT-mde, 7 kviri dan 25 kviramde hyavT stabil ur 8 sT-ian ganaTe-baze.

gamozrdisas gansakuTrebil i mni Svnel oba kvebas eni Weba. sasur-vel ia Semdegi sakvebis struktura (%): marcvl ovani sakvebi -58,3, qato-14, koptoni-4, cxovel uri sakvebi, an premiqsi-5, bal axis fqi-1 i-15, mineral uri sakvebi-3,7.

saxorced gamozrdac Rrma qveS-safenze warmoebs.

erTdri an i xvebs gamosazrdel ad svaven gamoCeki dan arau metes 12 sT-is gammavl obaSi. axal gamoCekil i ixi unda i yos moZravi, reagi rebedes xmaurze, mucel i unda hqondes akrul i, bumbul i sufTa da Tana-bari; cocxal i masa aranakl eb 45 g-isa. muSkiani i xvi gamozrda 10-11 kviris asakamde awarmoeben. pekinuri ixi ufro swrafad izrdeba, ami tommaTi dakvl amizanSewonil ia 6-7 kviris asakSi. temperaturul i reJimi mozardis gamozrdis dros unda i yos Semdeg: pirvel i 1 kviri gammavl obaSi iatakTan +33-34 0C, Semdeg temperaturas TandaTan amci reben da V kvirisTvis dahuavT +16-18°C-ze. SenobaSi fardobiTi tenianoba unda i yos 65-75%.

3 kviris asakamde sakvebis fronti unda Seadgences 1,5-2 sm-s, Semdeg 2-4 sm-s, darwyul ebis fronti Sesabami sad 1 da 2 sm-s. sasurvei ia saixveSi dReSi orj er moxdes wyl i gamocvl a. 1-7 kviramde i xvs darwyul ebisTvis esaWi roeba 1,1 l wyl i erT frTaze dReSi. wyl i nakl eboba amci rebs zrdas. 24 saatI uwyl oba amci rebs wonamatis zrdas, roml i kompensi rebas esa-Wi roeba 10 dRe.

ki dev ufro rentabel uria ix-vebis gamozrda wyl satevTan axl os. mag., meTevzeobis wyl sacav-Tan axl os gamozrda sakvebis danaxarj s amci rebs 30-40%-iT. 1 ha

farTobis mqone wyal satevzeixvis raodenoba ar unda aRematebodes 120-150 frTas. aseTi optimal uri datvirTvis SemTxvevaSi nakel is gamoyofis xarj ze izrdeba wyl is biomasada ixi warmatebi Ti yenebs masSi arsebul wyal mcenareebs.

i xvebisTvis saxorced gamozrdis SemTxvevaSi auciil ebel ia srul-fasovani kveba, radgan, i xvi bio-ogiuri Tavis eburebidan gamod-dinare, misTvis clamaxasi aTebel ia zrdis maRai i tempi da sakvebis kargi aTvis sebis unari. pirvel kvi-ras auciil ebel ia sakvebi i yos proteinis maRai i done (21%) da sami mocvl o energia 1,26 mj oul i. i xvi suqebis periodi grZel deba 55 dRemde. amis Semdeg organizmSi mcirdeba zrdis intensivoba.

amrigad, pekinuri ixi gamozrda maRai rentabel uria sakarmi-damo tipis fermerul i (gl exuri) meurneobis pirobebSi, radgan i xvs axasiaTebis swrafi zrdis tempi, erT kil ogram wonamatze nakl ebi sakvebis danaxarj iT da drois mokl e Sual edSi iZI eva saukeTe-so sagemovno Tvis sebebis mqone maRai i xarisxis xorcs.

**koba nacval aze  
sofI . meurn. mecnierebaTa  
doqtori, saqarTvel os  
agraruI universitetis  
mix. rceul iSvil ismecxovel eobis  
biol ogiuri safuzvl ebis  
Institutis direktori**

## qarTul i Zroxisj iSebi

qarTul i mTis Zroxa uZvel esi, unikal uri j iSia. am j iSma didi rol i Seasrul a qarTvel i xal xis ma-terial uri kul turis ganviTarebaSi. sasofI o-sameurneo samuSaTa Sesasrul ebl ad mas saukuneebis gammavl obaSi, rogorc erTaderT gamwev Zal as iye-nebdnen.

winaT qarTul i mTis j iSis Zroxa mTel saqarTvel oSi farTod iyo gavrcel ebul i, amJamad ki qveya-naSi maTi sul adobis 8-10%-s Seadgens, is mxol od maRai i mTis sofI ebSia SemorCenil i (xevtureTSi, svaneTSi, aWaris mTian nawil Si da sxva). ZI ier da-

ferdebul i mTis saZovris gamoyenebis unari, Sim-SiI obisa da sxva cudi pirobebis mimarT amtanoba da magari konstitucia am j iSis Zvirfasi Tvis sebebia.

gaumj obesebul i kvebis da movl i pirobebSi (saqarTvel os mecxovel eobis yofiI sacdel sadgur-Si) am j iSis furebis saSual o wl iuri wvel adoba 1900-2000 kg-mde gai zarda. ufro karg pirobebSi gadayvanil i cal keul i furebis wvel adoba 4100 kg-s da mets aRwevs, cximianoba ki 4.8-4.9% Seadgens. rogorc vxedavT, am Zroxis rZis cximRZianoba maRa-lia da wvel adobis gazr dasTan erTad cximianobac

imatebs. am Tvis sebi T qarTul i mTis Zroxas mkveTrad gansxvavdeba kul turul i j iSebisagan, romel Ta wvel adobasa da cximianobas Soris korel acia uaryofiTia.

kul turul i j iSis didtanian furebs 1500-2000 kg saSual o wvel adobis 1 kg rZis warmoebi satis daxl oebeiT orj er meti sakvebi swirdeba, vidre qarTul i mTis Zroxas, rac garkveul pirobebSi adgi-l obrivi j iSis moSenebis upiratesobas gviCvenebs.

intensiuri suqebis qarTul i mTis j iSis mozvrebis dReRamuri wonamati 650-700 g-s ar aRemateba da sabol oo masa dabal ia, magram xorcis kul inarul i Tvis sebebi metad maRal ia, rac agreTve j iSis dadebiT Tvis sebad unda mi viCni oT. qarTul i mTis j iSis Zroxis mTavari nakl ia xangrZI ivi cudi kvebisa da Senaxvis gamo daknneba, dabal i cocxal i masa, sxeu-l i scal keul i nakveTebi s aradamakmayofil ebel i eqsterieri, rac kargi kvebis dasel eqci i ssual ebiT SeiZI eba gamoswordes.

Zroxis megrul i wiTel i j iSi gamoyvanil i a gasul i saukunis samocian wl ebSi megrul i mej ogeebis mier (Zmebi kvaracxel i ebi da sxvebi); mas ZiriTadad i give specifikuri ni Snejbi axasiaTebi, rac qarTul i mTis Zroxas, im gansxvavebiT, rom pirutyvs aqvs wiTel i feri, zemoT azidul i grZel i rgebi, Seguebul i a momTabareobas, nakl ebardaris cudi pirobebis gavl eniT daknnebul i, xasiaTdeba simkvircxi i Ta da gaumj obesebul i samuSao Tvis sebebiT, ri Tac ganTqmuli i iyo dasavl eT saqarTvel oSi. dadgenil ia, rom am j iSis xari gammewunarianobiT didad aRemateba qarTul i mTisa da sxva Seswavl il j iSebs. is imdenad muxl muRI el i da CI iqmagaria, rom Cvil i xboc ki momTabareobis dros 90-100 km qviani gzi gavl isas ar kowI deba. megrul i wiTel i j iSis Zroxebi mTel i wl is ganmavl obaSi iseT daWaobebul saZovrebs i yeneben, sadac sxvakul turul i j iSispirutyvs gavl ac ki ga-uWirddeboda.

muSa pirutyvis j iSebisaTvis damaxasiaTebel ia uxesi konstitucia, megrul i wiTel i j iSi ki am mxriv unikal uria, mas aqvs metad nazi, amave dros ZI ier magari konstitucia, rac merZeul i ZroxisaTvis aris sasurvel i. araCveul ebrivid intensiur nivTierebaTa cvl asTan dakavSirebiT yovel ki-l ogram cocxal masaze maT 20%-iT meti aqvT sisxli i raodenoba, vidre Sesadarebel kul turul j iSebs, aseve gazrdil i aqvT sisxl Si eriTrocitebi-sa da hemogl obinis Semcvel oba, meti aqvT pul si, sunTqva, Zvl ebis simagre, Semcirebul ia kunTebis bowkoTa diametri da Sinagani organoebis uj red-Ta sidi de.

es j iSi moSenebul i yavdaT rogorc samegrel os, i se mis mosazRvre guri i s, l eCxumis, imereTis, afxa-zeTis da aWaris rai onebSi. mTel wel i wads saZovarze, binebisa da damatebiTi sakvebis micemis gareSe Senaxvis eqstremal ur pirobebSi kuros cocxl i masa aRwevs 450-550 kg-s furisa 260-300 kg-s, wl iuri wvel adoba 900-1000 kg-s, cximZianoba 4.5%. furebis saSual o wvel adoba 2000 kg-mde gazardes, xol o sakmaod karg kvebaze gadayvanil i furebis sacdel i

j gufis wvel adoba 3000 kg-s miaRwia, maTi rZianobis koeficienti 8,3-s udrida. rekordul i wvel adoba 4315 kg-s aRwevda. intensiuri suqebis mozvris dReRamuri wonamati 700-750 g-s aRwevs. saqarTve-1 oSi Seqmnili i mdgomareobis gamo megrul i wiTel i j iSis Zroxis sul adoba bol o periodSi 1800 sul amde Semcirda. auci l ebel i a sagangebo zomebis mi Reba, raTaj iSi ar moi spos da ar dai kargas misi unikal u-ri genofondi.

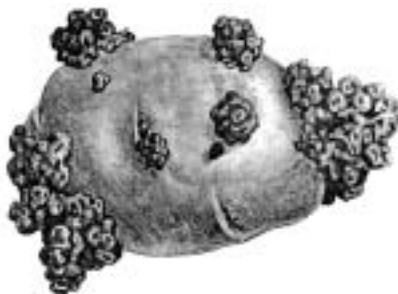
Zroxis kavkasiuri wabl a j iSi adgil obrivia, igi Sej varebis gziT aris gamoyvanil i da j iSad 1960



wel s iqna aRi arebul i. masSi xel sayrel ad aris Sexamebul i qarTul i Zroxis uZvel esj i Sebis gamZI eoba da cximianoba Semoyvanil i kul turul i j iSebis ma-Ral cocxal masasa da wvel adobas Tan. amis gamo axal ma j iSma mosaxl eobaSi mowoneba daimsaxura da mokl e xanSi iseTi farTo gavrcel eba moipova, rom misi sul adoba saqarTvel oSi 2-j er da metad aRemateba Zroxis yvel a sxva j iSis sas.

amJamad, kavkasiuri wabl a j iSze sanaSene muSaobis done saqarTvel oSi imdenad dabal ia, rom saWiro xarisxis kuros-mwarmoebl ebiS gamozrdac ki SeuZI ebel ia. Tu ase gagrZel da, j iSi sabol ood gadagvardeba da moi spoba, rac daabrkol ebs respubl ikaSi meZroxebis produqciis warmoebas.

**sul iko berize  
aWaris avtonomiuri respUBL ikissofi is  
meurneobis ministris modgil e**



# kartofili is kibo

**kartofili is kibo yvel aze seri ozul da saSi nel daavadebad i Tvel eba. misi gamomwvevi a soko - *SYNCHYTRIUM ENDOBIOTICUM*.**

pirvel ad kibo ungreTSi 1896 wel s aRweres, Tumca parazit is samSobi ojer ki dev ucnobia. daavadeba swrafad gavrcel da mTel dasavli eT evropaSi, xol o 1918 wel s aSS-Si. amJamad igi gvxdreba evropaSi, iaponiaSi, Crdil oeT da samxreT amerikaSi, samxreT afrikaSi. 1939-1940 wl ebSi daavadebis cal keul i kerebi gamoCnda dasavl eT ukraini sa da bel orusi s teritoriae. Semdgom daavadeba gavrcel da aRmosavl eTiT.

aRni Snul i sokoTi SeiZl eba daavades ZaRI yurZenasebrTa oj axis sxva mcenareebiC: pamidoris zogierTi j iSi, l encofa, ZaRI - yurZena, xebal axa da sxva. bunebriv pirobebSi SesaZl ebel ia kartofili kibos miRebi da gamavrcel ebl ebi iyos zemoT CamoTvili i ZaRI yurZenasebrTa oj axis warmomadgeni ebi.

kartofili kiboTi, fesvebis garda, avaddeba mcenaris yvel a organo, foTi ebsa da yvavil ebs CaTvl iT. avadmyofoba vl indeba qsovil ebs warmoqmniT, rac korZisebri warmonaqmnebis ganvi TarebaSi gamoixateba. isini Rruble s an axal gazrda yvavil ovan kombostos mogvagoneben. korZebi s warmoqmna iwyeba bol qvis Tvl eb-Tan. dasawyisiSi isini patarebia, - simindis marcvl isodena, Semdeg TandaTan i zrdeba da xSirad i seT zomas aRwevs, rom korZi mkvebab bol qvebze ufro didia. igi jer TeTria, rac xani gadis, korZi TandaTan fers icvl is da bol os, Ti Tqmis mTI ad Savdeba. rac imis maCvenebi ia, rom bol qvebis qsovill ebs daSi a daiwyo. korZi i peba da bol qvi mTI ad fuWdeba.

korZebi bol qvebis garda warmo-iqmneba fesvurebsa da fesvi yel ze. Zl ieri daavadebis SemTxvevaSi ase-Ti korZebi Reroebze, foTi ebsa da yvavil ebzec ki vi Tardeba. korZebi SeiZl eba miwi sqveSa Reroze da, saer Tod zeda nawi ebzec ganvi Tar-des. daavadebul i adgil is zeviT

moTavsebul i Reros nawi i xmeba. fesvebi ar avaddeba, radgan daavadebis gamomwvevi mxol od axal gazrda, mzard qsovill Si iWreba. korZebi s zoma- mcirezomi dan Tvi Tbol - qvis zomamde gansxvavebul ia.

kartofili is kibos gamomwvevi soko uj redSi ga parazi tad i Tvl eba. parazi tis moqmedebi T uj redi izrdeba, amasTan mezobel i epidermis uj redebi dabol qvis rbil obis uj redebi swrafad iyofa. araxel - sayrel i pirobebi sadmi maRai i gam-Zl eobis gamo infeqciis gamomwvevi maval i wl is ganmavl obaSi, 10-15 wl is, zogjer ki 30 wl amdec, niadagSi inaxeba, inarCunebs cxovel - myofel obas da kartofili isaTvis es niadagi didi xnis ganmavl obaSi gamousadegari xdeba.



bol qvebis infeqcia SeiZl eba sxvadasxva temperaturis dros 12-14°C-mde; optimal urad 21°C i Tvl eba.

kartofili kul turis daavadebis masavl i anoba mcirdeba.

kibos Zl ieri ganvi Tarebis masavl is danakargebma SeiZl eba 40-60% miaRwi os. saTesl e masal is xarisxic ecema da Senaxvis unars kargavs. sokos mavneobis da maRai i sicocxl i sunarianobis gaTval i swinebiT kartofili is kibo bevr qveyanaSi, maT Soris CvenTanac, sakarantino mavnebl ad i Tvl eba. kartofili is kibos wi naaRmdeg brZol is dros mTavar i sakarantino RonisZiebebia. im qvey-

nebi dan, sadac ki boa gavrcel ebul i, saTesl e da sameurneo masal is Semotana sastikad akrZal ul ia. kibos wi naaRmdeg sabrZol vel ad radikal ur RonisZiebad gamZl ej iSebis SerCeva i Tvl eba. daavadebul i bol qvebi, Rero-fOcebi unda Segrovdes da daiwvas. Tu nakveTze erTi dan xuTamde daavadebul i bol qvia, mosavl is aRebis dros, daavadebul i Reroebi da gorgl ebi unda daiwvas nakveTze. Zl ier daavadebis erTi metrisi Rrmis ormoSi unda Caiyros inficirebul i mcenaris narCenebi, damuSavdes ql oriani nazaviT an 5%-iani bordos xsnariT (20 l . m³ narCenze) da ormo kvl av miwiT dai faros.

inficirebul i niadagi ki unda damuSavdes preparati nemasol iT (xarj vis norma 60-120 g/m²). preparati kartofili is Tesvamde 30 dRiT adre niadagSi 20 sm. si Rrmeze meqani zebul i wesiT SeaqvT da niadags cel ofnis firiT. preparati gamoyeneba rogorc Ria, aseve daxurul gruntsi. daxurul gruntsi SesaZl ebel ia gamoviye-noT preparati „bazami di“ (xarj vis norma 40-60 g/m²). preparati kartofili is dargvamde 30 dRiT adre 20 sm. si Rrmeze meqani zebuli ad SeaqvT niadagSi da afareben pol i etil enis safars.

unda aRni Snos, rom kartofili i gansakuTrebiT Zl ierad avaddeba erT da imave adgil ze mudmivad Tesvis dros, ami tom swori Tesl b-runvis SerCeva daavadebi s wi naaRmdeg brZol is efeqtiani saSual ebaa.

aseve rekomendebul i damuSavebul i saTesl e masal is gamoyeneba. Tesvis win bol qvebs Tesl is Sesawaml i preparatebiT - „prestijiT“ (xarj vis norma 1 l . 1 t. Tesl ze), „preumiT“ (1-1,3 l . 1t.), „sel est topiT“ (sargavi masal a unda Seiwaml os uSual od dargvamde an dargvis dros - 10 l . 1t Tesl ze) unda damuSavdes.

**sursaTis erovnul i saagento**



# ხიმინლის ქართული



## \* ლომთაგორა 1

სამარცვლე პიპრიძი;  
სიცშირე — 55-60 ათასი ძირი ჰა;  
ვეგეტაცია — 124-126 დღე;  
უცვოსავლიანი, ჰა-ზე  
იძლევა 8-10 ტონა მარცვალს.

## \* ლომთაგორა 2

სამარცვლე-სასილოსე პიპრიძი;  
სიცალი — 265-280 სმ;  
სიცშირე — 45-50 ათასი ძირი/ჰა;  
ვეგეტაცია — 134-136 დღე;  
უცვოსავლიანი, ჰეპტარზე  
იძლევა 8-10 ტონა მარცვალს,  
ან 60-70 ტონა — სასილოსე მასას;  
კარგად ეგუება ფირიან პირზებს.

## \* ლომთაგორა 3

სამარცვლე პიპრიძი;  
სიცშირე — 55-60 ათასი ძირი/ჰა;  
ვეგეტაცია — 130-132 დღე;  
უცვოსავლიანი; ჰა-ზე იძლევა  
8-10 ტონა მარცვალს;  
რეკომენდებულია აღმოსავლეთ სა-  
ქართველოს სარცხავი ზონებისთვის.

## \* ლომთაგორა 4

თეთრი პიპრიძი;  
სასურსათო, შეიძლება სასილოსედ  
და საფურაზედ გამოყენება;  
მცენარის სიცალი — 308 სმ;  
გარცვლის მოსავლიანობით 22-24%  
აზარპეპს „აჯავეთის თეთრს“;  
სიცშირე 45-50 ათასი ძირი ჰეპტარზე;  
ვეგეტაცია — 140-143 დღე;  
გაძლევა ჩანოლისადმი.

## \* ლომთაგორა 5

თეთრი პიპრიძი;  
სასურსათო-საფურაზე; სიცალი — 303 სმ;  
გარცვლის მოსავლიანობით 36-38%  
აზარპეპს „აჯავეთის თეთრს“;  
სიცშირე 45-50 ათასი ძირი ჰეპტარზე;  
ვეგეტაცია — 141-143 დღე;  
გაძლევა ჩანოლისადმი.

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