

**SKIE ON·ANI
KI·TAP
TM 03 11/04**

**WA·AKO GE·E
JELROROATANI**



NATIONAL MISSION ON BAMBOO APPLICATIONS (NMBA)

Technology Information, Forecasting, and Assessment Council (TIFAC)
Department of Science and Technology, Government of India.

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National Mission on Bamboo Application (NMBA) ko India sorkarini Science and Technology (ST) Department a bachengataha· Technology Information, Forecasting, and Assessment Council (TIFAC), ni kam kaan baksa National Bamboo Mission wa·a ge a ba jakalani ba palbadingani ba·dingo dingtangmancha gial choeko on·a man·enga· Wa ako jakaltobate tariani cholrangko am na, sol·a repanio changa sapani gadangko tangtobatna· Aro uarangko saksa sakgipinrangna skirikrikna, palbadingani cholrangko sandie on·a aro wa ao pangchake janggi tangna chol dakenggipa dolrangni kumong nangrime ba ku cholsan kam ka e namdapaniko ra bana ia Missionan kamkoba jako ra enga.

Kitapko chappa ka gipani kukum ba see on aniko man chenggija iako chappa ka taina, dingtang je rokomni bimangonaba tarina ba tarie watgrikrikna onja.

Chapa ka gipa-

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Technology Information, Forecasting and Assessment Council (TIFAC)
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KATTA JA·PARANG

- A.chiku.ona pe.skani gimin u.iatani
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- Wa·ako Ge·e Jelrroatani
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A·CHIKU·ONA PE·SKANI GIMIN U·IATANI

Meghalaya Stateni apalani ritchao chi·brina baten chaenggipa wa·arangko name jakdangdikna aro jakalna nanga ine nikaha· India Sorkarini dingtang dingtang Ministryrang aro gipin dolrangba wa'aoniko banga namgnirangko bikotna man·gniko nika tangka-paisa aro gipin dakchakanirangko on·e wa·ako jakalani bidingo dingtangmancha cholrangko dake on·a a·bachengaha· On·enggipa tangka-paisa ba dakchakaniko name jakalna gitade ge·na miksonggipa manderangna nama chararangko jelatani, ge·ani bewal, den·e ra'baani aro ronggiting palaigija songo-nokon wa·jolko dam bate man·a tarianikoba skie on·a nanga· National Mission on Bamboo Application (NMBA) wa·ani bidingo skie on·a kitaprangko chapa ka·manaha· Ia kitaprangko A·chikuona pe·skagenchimode ge·e game chagiparangna aro Sorkario ka·mani gadango kam ka·enggipa manderangna namen jakaltobegen ine chanchie nanganikoba nikaha· Ian A·chikuchi pe·skana a·bachengasan ong·aia· Iana agreba banga kitaprangko A·chiku chi pe·e chapa ka·gen jekon A·chik songni manderangba ku·tangchin poraie ma·sina aro jarikna mangen.

Adita sak manderang ia kitapko A·chikuchi pe'na dakchakaha· Shri V·S·Oberoi, IAS Principal Secretary to the Government of Meghalaya, Forests & Environment Department aro Shri V·K·Nautiyal, IFS Principal Chief Conservator of Forests Meghalaya ia peskaani kamko ka·na didiaha· Smti Liezabel P Marak, Garo Law Translator, Law Department Meghalaya somoi jokate aro chutini salrangko ra'e skanggipa pe'aniko kamko chu'sokataha· Shri Nokman M Sangma, Lower Division Assistant Meghalaya Civil Sectt pe·skagiminko somoi choljokate Computer o name type doke on'aha· Nipiltaie namdapatani kamrangko Shri C·P·Marak, IFS Conservator of Forests, Social Forestry & Environment Meghalaya dakaha· Chapa ka·aniko aro somoi gita ong·katatna Shri H· C·Chaudhary, IFS Planning Officer (Forests) ba jak on'paaha· Segualanirang dongnaba gnang· Uarangko mikkangchango nambatatatna joton ka·gen.

C·P·Marak, IFS
Conservator of Forests,
Social Forestry & Environment Meghalaya, Shillong

JANAPCHENGANI

INDIA A·SONGNI MANDERANG JEMANGAN ma.giticham-pagitchamrangoni intalan wa·arangko an·tangtangni nanganirangna bagan-barirango aro songni a·arango ge·barongenga gita, wa·ako ge·anio namnamgipa a·selrang gnang. Wa·ako ge·aniara namgipa kam ong·a; uni dal·ninganiko aro samsirangna bate bolchae chu·gimik dal·aniko nienba kusi ong·na man·a. Iako dakanio man·dapaniba donga aro indaken a·song gimikni manderangan an·tangtangni bagan-barirango ge·anirangko daktokenga..

Skanggipa aro mongsonggipa ge·ani bidingo dakna nangani kamara ge·ani bosturangko man·chengna nanga. Magitcham-pagitchamrangoni intalan wa·a bitchilrangko aro wa· bi-sarangko ge·e wa·arangko jelataha. Indiba, bang·a gamchatgipa wa·ani ma·malrangan ruuta bilsirangni giseposa bibal balani gimin aro uarangni bibal balani somoirangko chu·gimik ma·sikujani a·selo bitchilko ge·e jelataniko nikrongbreja aro ge·genchim ong·oba pangnan chu·sokrongja. Chengonin dakbarongenga gita aro giticham niamrangko namdapatanihi gisik a·ning bitgiparang (scientists) wa·ako jelatna gita gital gital ge·anirangko ra·gataha.

Ia skie ra·ani kitap dingtang dingtang manderangni namnike ra·chakgimin kamrangko aro namgipa ge·ani niamrangko noksarang baksa toe agananirangko janapaha. Ia kamni bidingo talataniara bitchilko ge·e wa·arangko jelatani ong·a, jekon ge·gipa mande ge·na man·gen aro ge·ram



biaprango ge·na gita man·gen. Tissue culture method-ko dakna gita mongsonggipa kamrang, laboratory facilityrang (samrang), kamna nanggipa bosturang aro ia kamni bidingo dingtangmancha skie ra·gimin manderangko iano man·chapja.

Ia ki·tapko tarina gita bang·a manderangan an·tangtangni u·ianiko aro dake nie ma·sigiminko agan·parake on·aha. Rain Forest Research Institute (RFRI), Jorhat-oni Dr. S. Pattanaik aro State Forest Research Institute (SFRI), Itanagar-oni Dr. Haridasan aro L.K. Bhuyan-mangni dakchakaniko man·e skanggipa seaniko (draft) NMBA-ni dolrang (Suneel Pandey, Deepti Dabas, V.S. Oberoi)-mang seaha. The Energy Research Institute (TERI), Delhi-oni Sudhir Pande, Dr. Sanjay Saxena aro Rain Forest Research Institute, Jorhat-oni Dr. R.L. Banik aro Dr. Y.C. Tripathi tarigimin draftko nitaiaha aro taridapaha. Kerala Forest Research Institute (KFRI)-oni Dr. S. Pattanaik, Dr. Muktesh Kumar, Dr. Sanjay Saxena aro NMBA-ni dolrang photorangko on·aha. Indira Chandrasekhar chappa ka·na gita tariaha; Mugdha Sethi noksarangko salaha. Iako tarimiting somoio, 'Propagation and Cultivation' Mission-ni dolrang aro kam ka·na sapgipa dolrang ia ki·tapko name nichengaha, agan·ku·patianirangko dakaha aro gualanirangko mesoke on·aha. Iamangni on·gilanirangko kusi ong·e ra·chakaha.

Ia kan·dike segimin ki·tapko name jakkalna gita aro ge·e jelatani kamrangko ka·anirango dakchakgipa ong·china gita ong·a. Ia ki·tapko bang·en jakkalgen ine chinga bebera·a.

Vinay Sheel Oberoi

Mission Director, NMBA

November 2004



■ TALATCHENGANI

WA·A-RA SAMSI ONG·A, mongsongde boltong daka aro ta·rake dal·ninga. Iako bang·en jakkalna man·a - ma·gitcham-pagitchamrangni somoirango aro ia salrangoba. Ia salrango Indiao wa·arangko bang·en dabienga, mongsongbate gital gital jakkalanirangna ong·a. Unigimin, wa·a gitingko nangani batrorobaenga - indiba nanganirangna name aro nirok-simsake ge·anichi wa·arangko nangnikenggiparangna on·a gita man·gen.

Jedakgipa rokomni ge·anirangko dakna a·bachengna skangba, ge·a a·pal dal·a aro chonako minggija ge·ani bosturangko man·chenganian mongsonggipa ong·a. Ia kan·dikgipa skie on·ani ki·tapara ge·ani bidingo maikai namgipa ge·ani bosturangko man·a amgenchim uarangko mesoke on·an baksana wa·ako jelrroatna gita talate on·aha.

Mongsongbate, Indiani wa·a ma·malrangara, ja·pango apsan charima aro chata, kan·dika aro ku·chotona apsan chadoa. Ia ki·tapo wa·ako ge·e jelataniko janapgiminrangara indakgipa wa·arangna namgipa ong·a. ■



■ WA·A BIPANG



WA·A BIPANG-ara bringipa ong·a aro uno bang·a bakrang gnang. Ia bakrangara, ja·pang, ja·dil, biskurang, bipekrang, bimikrang aro bitchilrang ong·a. Ia bakrangan jelrroatna dakchakgiparang ong·a.

Wa·a bipang - bolrang gita, jean bitong ba mongsonggipa bak gnangchim - ge·gni bakrang gnang; a·a kosako ge·sa aro ge·gipin a·a ning·o donga. Ga·tong ge·prakan sima dake biskuchi sualaha.

- A·a kosako a·bachenge chagipa bakrango biskurang gnang, changroa aro ku·choto ro·sroka jekon ga·tongrang ine agana. Gnigipa bakara ja·pangoni bipek dakbae a·palchina chadoa.
- A·a ning·o chagipa bakara dotgimik daka aro ja·dilrang aro bimikrang baksa chaa.

BISKURAN ARO WA·TONGRANG

Wa·a bipangni ja·dil, ga·tong aro bipekrangko biskurangchi bak dakaha. Ia biskurangan dal·droani mongsonggipa bak ong·a jeoni gital ga·tongrang nabaa.

Bisku ge·gni gisepgriko donggipako wa·tong ine minga aro iani ro·aniara wa·a ma·malni kri ong·a. Ia wa·tongrang konggranga aro bikaprangchi pindapa; ia bikaprang wa·ani dal·roroani kri go·oke kata.

Wa·tongni wa·a birangrangko ga·tongni joljol srongsrong dake donaha, jedakode watok gita chi aro cha·anirangko kosakchina salopna man·gen. Wa·tongni birangrang apsan ritingo donga. Ia riting gita chi aro cha·anirang jokrurana man·a.



GA·TONG

Wa·a bipangko ta·rake nikningna aro altue ma·siningna man·gipa bakara uni ga·tong ong·a. Aro iakon bang·bate jakkalgipa bakba ong·a. Bang·bata wa·a ma·malrangni, ga·tongrang changroa, boltong daka, konggranga aro ku·chotchi ro·sroka. Dinggipa biapni wa·a ga·tongrang ja·pango apsan charima.

Ga·tongrang dingtangmancha bak daka aro dotgimik biskurang daka jerangkon wa·sing toksa dake donaha. Wa·singni bisku ge·antian cheksini bimik gnang, jeonin ja·mano bipekrang, bijakrang, biterang aro bitchilrang ong·katgen.



Ga·tong ja·pangni bimikoni ong·kata. A·aoni bimik chadobae chongipa ga·tong ong·a. Nakatchenggipa ga·tong nama aro cha·na nama, indiba uarang ta·rake dal·roroa aro ja·mano boltong daka; sal 80-100 ni gisepo chu·gimik dala.

JA·PANG



Ja·pangara a·a ning·o chagipa wa·a bipangni bak ong·a. Ian a·a ning·o chaa aro jelrroa aro dal·roroe samtangtangni a·arangko mangrakata. Iako bita gita nika; ia bita ge·antina ku·choto petchoka aro gitdok gita daka aro bita ge·sa ge·gipin bitarang baksa nangrima. Ia ja·pang dal·droani somoi ong·kujamitingo chimonggimin cha·ani aro dal·rorona dakchakgipa cha·ani·ringanirangko chimonge dontimgipa ong·a, aro iarangko dal·droamiting somoio wa·a bipangko dal·roroatna gita jakkalskaha. Wa·ani bimang aro uni ro·ani ja·pang ong·ani rokomo pangchaka. Dinggipa biapni wa·a ja·pangrang chata, kan·dika aro apsan charima, aro sin·gipa biapni wa·a ja·pangrang ro·a, dal·breja aro apsan charimja.

Ia ja·pangoba bisku aro biritchurang donga, jekon wa·ringkapchi pindapa. Cha·ani·ringanirangko man·gipa ja·dilrang biritchuoni ong·kata.



BIMIKRANG

Bimikrang wa·a ga·tongoni aro ja·pangni samtangtangoni ong·kata. Ga·tongni bimikrang biritchuni kosak mangmango donga aro ja·pangni bimikrang biskuni chapchap donga.

Bimikrang mongsonggipa bak ong·a, jeonin gital ga·tongrang ong·kata aro ge·ani somoio gital wa·a bipang ong·na gita man·a. Gital mongsonggipa ja·pangrang aro bimikrang jerangan ga·tong ong·bagenchim, ja·pangni bimikoni chaa.

Me·a bisokrang wa·a ma·malni kri chaa, ka·mabatgipa biritchuoni kosakona ba bijangchi biritchuoni kosakona chaa.

JA·DILRANG

Ja·dilrang a·a ning·o pangchakaniko on·a, aro gipin bakrangna cha·ani·ringanirangko sualata.

Ja·dilrang a·a ning·o donggipa ja·pangni biritchurangoni chaa. Badiaba ma·malrango, ja·dilrang a·a kosako chagipa ga·tong aro cheksirangoni ong·kata. Ia ja·dilrang ning·tue chaja indiba te·sapgipa aro jelrorogipa ong·a.



Ga·tong ja·pang aro cheksirang gita ong·gija, wa·arangni ja·dilrangko biskuchi bak dakjaha aro wa·ringkapchi pindapja. Badiaba wa·a ma·malrango, cheksi ong·katgipa biskurangoni chagipa ja·dilrang a·palo gena gita nama

WA·A BIPANG

BIJAKRANG

Wa·a bipangni bipekrang aro chonchongipa cheksirango bijakrang ong·a. Iarang wa·a bipangko tange rakkina gita mongsonggipa bakrang ong·a. Iarang wa·a bipangko suuri aro mikkarangoniko naljokata.

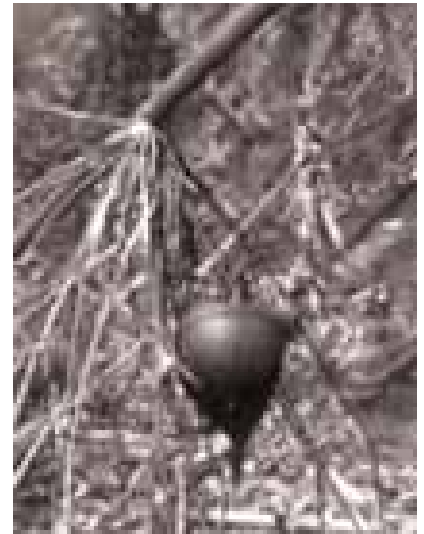
Bang·bata wa·a bijakrangan joksolsolgipa ong·a aro iarang bilsi bon·ao a·aona ga·akone namgipa a·salrangko ong·ata. Iarang matburingrangna namgipa cha·aniba ong·a.



BIBALRANG ARO BITCHILRANG

Wa·a bibalrang pul bibalrang gita jaksa jaksa dakja, indiba biskap gita dalgapa. Wa·arang balwachi bite nangana bibal ge·sani gindeko ge·gipino nangrimata aro uandaken bibalrangba bala aro bitchil dakgipa bibalni bak bismakrara daka.

Jelroroatna gita, gipinming nangrimgipa - aro mongsonggipa - bakara wa·arang bibal balsimsimaigipa ong·ja aro ruuta bilsirangni ja·manosa bibal balaia. Unigimin, bitchilrangko man·rongbreja.



Wa·a bite minahao bretja aro uno bitchil rongsa dongaia, jekon 'caryopsis' ine agana (bitchilni kosakgipa bigil bikopming nangchape donga). Wa·a bitchilrang apsan ong·ja, misi gita chonaoni chonggipa komperam gita daka..

■ WA·AKO GE·ANI

WA·A-ra nangchongmotgipa ong·a. Ian hajalni hajal ma·gitcham-pagitchamrangni salrango jakkalanirangko see dongimin donga, aro ia salrangoba bang·en gital gital tarie jakkalanirang donga.

Wa·ako ge·na altua

Ian rakgipa, ta·rake dal·ninggipa aro je dakgipa sal·somoirangoba tangaigipa ong·a. Ge·mitingo bang·gija simsakaniko nanga aro bang·a bilsirangna mangrakgipa ja·pangrangko ong·ata.



Chaenggipa wa.a Noksamo

Wa·ako bang·a kamrangna ge·na gita man·a aro ge·aha.

- India a·songni manderang aro jatrang wa·ako an·tangtangni noksamrango aro bagan-barirango ge·aha aro nirok-simsakaha. Iarangko altue man·anichi an·tangtangni nokrango dingtang dingtang nanganirangna jakkalna gita man·aha. Una agreba, me·arangko aro wa·a ga·tongrangko palanichi uamangna man·dapanikoba ra·baaha.
- Ba·ding-chiwalgiparang an·tangtangna wa·a-rangko ge·e ra·a aro uarangko den·e bazarango pale an·tangtangna lapko daka.
- Adita manderang wa·arangko an·tangtangni bagan-barirango nitoatna gita ge·toka. Iarangko uamang damsan tom·dake ge·a aro berarangko duule ge·e ba pul me·dikrango ge·a. Wa·arangko nok mikkangko peng·na gitaba jakkalna man·a aro indake dakanichi mandeskarangni parak parak nikaoniko champengna gita man·a.
- Game cha·giparang wa·grimrangko dake balwaoniko aro gipin ken·gnigipa obostarangonikoba naljoke dongna man·a.

Indiao bakrobegipa wa·grimrang donga. Iarang buringrango ramram chaia. Iarangko noksarango aro an·tangtangni bari-baganrangoba ge·aha.

Wa·ako ge·anichi, mongsongbate name simsake ge·enba uni bite nanganiko nika ia salrango manderangko wa·arangko ge·na gita gisiko nangataha.

Sorkari wa·arangko buringrango ge·china gita didiaha aro mande sakantiko, jatantiko aro bading-chiwalgiparangko wa·arangko ge·china gita didiaha.



WA·AKO GE·ANI

- Bang·e aro bite gnanggipa ge·aniko dakanichi pangkamgipa aro namgipa rokomni wa·arangko ong·katatna man·gen. Indake dakanichi da·ororo manderangni dabienggipa namgipa rokomni wa·arangko ong·katatna man·gen aro gamchatgipa kamrangna jakkalna man·gen.
- Wa·arangko ge·anichi aro uarangko den·e pale jakkalanichi bang·a manderangna kam man·a gitaba dakchakani ong·gen aro tangka·paisarangko man·a gitaba dakchakgen.
- Jakkalkugijagipa a·arango aro a·a rikamrango wa·arangko ge·anichi a·ako gital ong·atna dakchaka aro a·ako mangrakata aro a·a rurongaoniko champengna man·a.

Wa·ako ge·na gita chi aro a·salrangko nanga aro uko name nirok-simsake ge·anichi uoniko man·dapanirangkoba man·aha.

Namgipa ge·ani bosturangba mongsonggipa ong·a. Wa·a bipangni gimin sandichengna nanga aro ge·ani bosturangko basechenganian ge·na sienggipa mandeni mongsonggipa dakna nangani kam ong·a.

- Ian mongsonggipa chanchie dakna nangani kam ong·a maina ian wa·a bipangni dal·roro-silroroani aro namgipa jakkaltogipa wa·ako ong·atna gita pangchaka - aro uandaken man·pilaniba donga.
- Iano ge·ani korosrangkoba man·chapa. ■

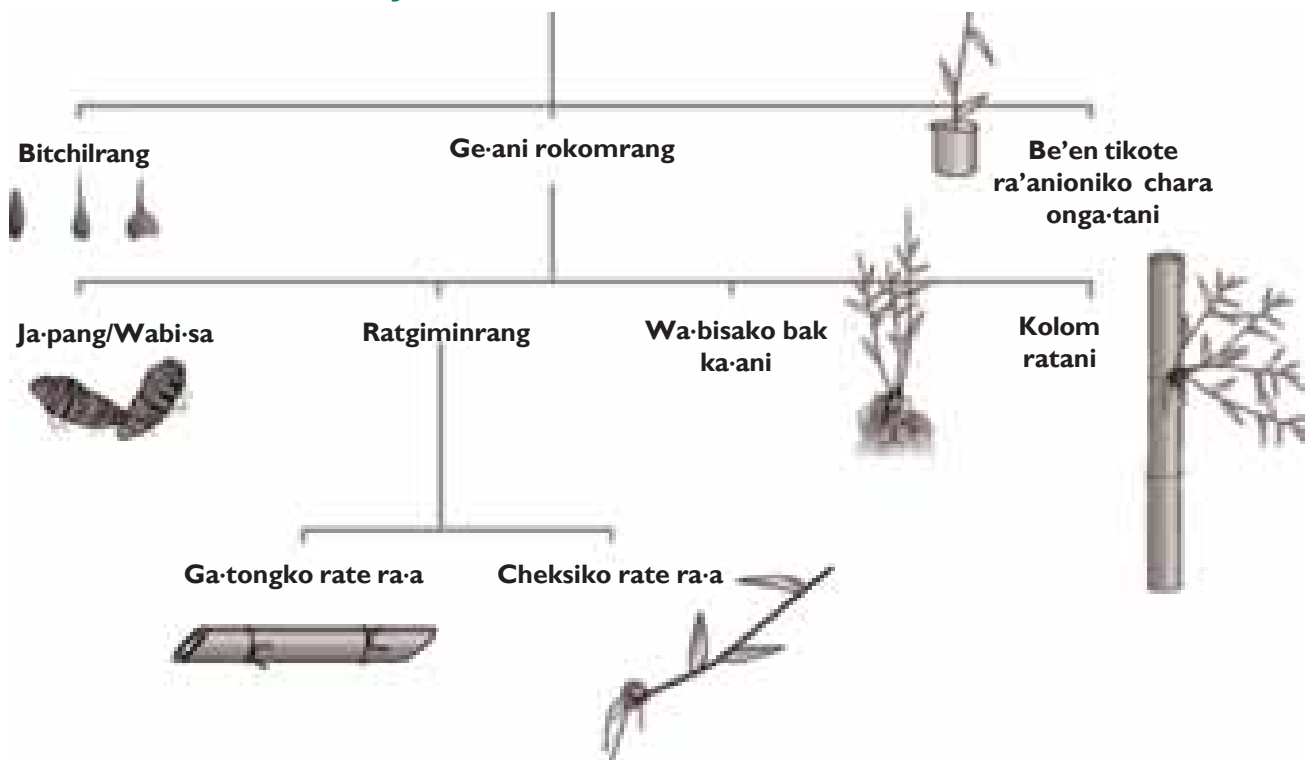


■ WA·AKO GE·E JELROROATANI

A·gilsak gimikni sam·bolrangko, ge·na gita altubatsranggipa aro ramram ge·e jelroroatani kamara bitchilko ge·e jelatanian ong·a. Indiba wa·akode bitchilchi ge·na gita man·rongbreja.

Wa·a bitchilrangko altue man·ja : badiaba ma·malrangode bitchilan dongsrangja, aro gipinrangara bibal balani somoirang ruuta. Man·genchim ong·oba wa·a bitchilrangni tangani somoirang kan·dika aro uandaken bimik nae chaaniba komibea.

JELROROATANI NIAMRANG





Ia skie on·ani kan·dikgipa ki·tapni miksonganiara bitchilchi aro wa·ako dingtang dingtang ge·ani rokomrangko dake ge·anichi jelroroatna gita ong·a. Ia ge·ani bewalrangara ma·gitcham-pagitchamrangni dakbarongbaenggipa ong·a aro uarangko pilakan name ma·sia. Ia salrango sandi-niroke kam ka·anichi nambate ge·ani bewalrangara dakaha, aro dingtang dingtang gital gital ge·ani niamrangko ra·galaha, mongsongbate ta·rake jelroroatna gita ong·a.

Be.en tikote ra.'a oniko chara pilatani jean ia ki·tapni a·palo ong·achim, ian wa·ako jelroroatani minggipin kam·chol ong·a. Ian ta·rake aro bang·e je sam·bolrangkoba man·a amani chol ong·a. Iako dakani rokomara chongipa bipeko (bipekni ku·chot, bisku, bimik ba bitchil)-ko ra·e uko bite nanggija dakatgipa a·sal gnanggipa biapo donani ong·a. Indake ge·ani rokomko (tissue culture) bading·chiwalna namgipa rokomni wa·arangko ge·e jelroroatna gita ong·a. Iako dakna gita dingtangmancha ge·ani bosturang aro nirok-simsakgipa dolrang dongna nanggan.

Ja·pangoni chagipa wa·arangna batede bitchiloni chagipa wa·arang dal·ningna aro brining-na riate somoi nanga.

Indiba bitchilko ge·e jelataniara apsan rokomni wa·ako ong·ata. Ja·pangko ge·e jelataniara, wa·a bipangrang ja·pang ge·saoni ong·kata aro apsan rokomni wa·ako ong·atja.

Bitchilko ge·genchim ong·ode, wa·ani ong·bachenganiko u·ina man·a. Bibal balarangko nieba wa·ani ong·bachenganiko u·ina gita man·a. Ma·pangko banoniko ra·bahachim uani gimin ruuta salrangna name sandie ma·siana agre de wa·arangkoge·e jelroroatanio wa·ani ong·bachenganiko u·ina gita man·ja. Indake dakna gitaba man·rongbreja.

Bading·chiwalna miksonge ge·gipa wa·arang bibal balani ja·mano bitchilrang ong·a aro wa·a bipangba sia. Wa·a ong·bachengani aro bon·ani gimin u·ijagenchim ong·ode indakgipa ma·malrangna kenchakani gnan, maina basako bibal balgen aro badia bilsirangni ja·mano sigen iani gimin u·isoja. Indiba, indakgipa ma·malrang ruuta bilsirangni ja·manosa bibalanigimin, kenchakani donggenchim ong·oba ka·dimeani donga.

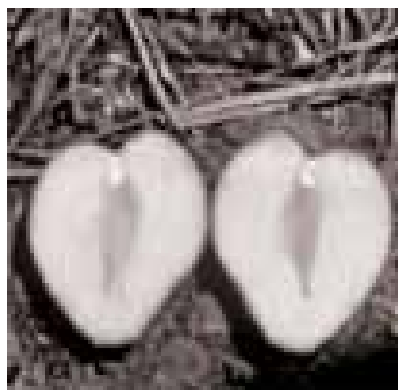
■ BITCHILKO GE·E JELROROATANI

WA·A bitchilara damni kri kamna cholgipa aro jelroroatna gita dakchakgipa ong·a. Jensalo wa·arang bibal bale bitchilrang ong·a - indake ong·na gita ruuta bilsirang nangnaba donga - hajalni hajal bitchilrangko ong·katanichi gital ma·chongko ong·ataha.

Je bilsio bibal balgenchim (ba bilsirang, jeon bibal balchimtoka), bibalrang November aro April jani gisepgriko balronga. Bitchilrangko March-April jarangoni man·genchimoba, May-July jarango man·gipa bitchilrangan nambata aro bite nangbata.

Ma·malrangni kri wa·a bitchilrang apsan rokom ong·a, mitamrang chona aro mitamrang dal·a.

- *Bambusa bambos* wa·ani bitchilrang chona : Kilogram sa·o rong 1,00,000 bitchilrang donga.
- *Bambusa tulda* wa·gi bitchilrang una bateba chonbata, kilogramprako rong 1,25,000 bitchilrang donga.
- *Melaconna baccifera* (watre) wa·ani bitchilrang namen dala : kilogram sa·o rong 65-75 bitchilrangsan ong·aia. Uni biteara komperamni dal·a gita daka ba chongipa apple gita dal·a.



Wa.tre bitchil



BITCHILKO GE-E JELROROATANI

Wa·arangni bitchilrang bang·a-bang·gijanide biapni kri aro dintang dintang ma·malrangni kri ong·a.

- *Bambusa bambos* wa·ao bitchilrang joksolsolpil·e ong·a, indaken burinrangni a·arangan chatpila. *Dendrocalamus strictus* wa·arang kilogram 30-35 bitchilrang ong·a.
- Badiaba ma·malrangde bibalan balsrangja - ba, bibal balani gimin see rakkianirangba dongja.
- Badiaba ma·malrang bibal bala, indiba bitchilrang dongja. Mitamrango bitchilrang donga indiba bang·gijasan ong·aia. Indakgipa ma·malrangni bitchilrangko man·a neng·a, maina indakgipa ma·malrang bang·e jelja.

Noksamo ge·ronggipa minggni ma·malrang, jekai *Bambusa balcooa* aro *Bambusa Vulgaris* wa·arang, basakobasan bibalaia. Jensalo bibal balgenchim unode bang·en bibalskaa aro dintang dintang wa·a bipangrango bibala. Indakgipa bibalanirang bitchilrangko ong·atja.

Unigimin indakgipa ma·malrangkode ma·gitcham-pagitchamrangni ge·ronga gita ge·osa jelroroatnade man·aigen. Minggipinara, bipek chonako peake ge·anichi jelatna gita man·gen.

Indake dakgenchim ong·oba wa·a bitchilko ge·ani ja·pang gita ra·na kenani ong·a. Iako basakobasan man·aia, aro pangnan agansona gita man·ja, maina bang·bata ma·malrangan bibalani somoirang ruuta.

- Wa·arangni bibalani dintang dintang ma·malrango pangchaka. Ruutani ja·mano bibalgipa wa·arangni bibalani rokom gni gnan - tomdak tomdake balchimgipa aro priprae balgipa.



Wa·geni bibal

India a·songni wa·arangni bibal balani rokomrang aro bibalani sal-somoirang.

Ma·malrang	Bibalni rokomarng Bibalani somoirang	(Bilsirang)
<i>Bambusa balcooa</i> (borua)	Balchimchima, tomrake bala aro nikrongbreja, bitchil dakja	35-45
<i>Bambusa bambos</i> (wa.kanta)	Balchimchima, basakoba priprae bala	40-60
<i>Bambusa nutans</i>	Priprae bala, basakoba Balchimchima	35
<i>Bambusa pallida</i> (wa.tesa/wa.tabok)	Priprae bala	40
<i>Boambusa polymorpha</i>	Balchimchima/Priprae bala	55-60
<i>Bambusa vulgaris</i> (wamanna)	Priprae bala aro nikrongja, bitchil dakja	80-na bata
<i>Bambusa tulda</i> (wa.ge/ wagi)	Balchimchima, basakoba priprae bala	30-60
<i>Dendrocalamus brandisii</i>	Balchimchima/Priprae bala	40-45
<i>Dendrocalamus giganteus</i>	Priprae bala	40,85
<i>Dendrocalamus hamiltonii</i> (wa.nok)	Balchimchima/Priprae bala	30-40
<i>Dendrocalamus strictus</i>	Balchimchima/Priprae bala	25-45
<i>Melocana baccifera</i> (wa.tre)	Bang-e balchimchima, basakobade priprae bala	30-35,45,65
<i>Ochlandra travancorica</i>	Balchimchima	7-15
<i>Oxytenanthera stocksii</i>	Priprae bala, bitchil dakja	40-45
<i>Schizostachyum dullooa</i> (wa.dro)	Priprae bala/Balchimchima	30-45
<i>Thyrsostachys oliveri</i>	Balchimchima	48-50

- Bang-e bibal balchimchimaniara, biap damsano chagipa wa·a ja·pangrangni ga·tong gimikan bibaltoka, jean adita jarangoni bibalna a·bachenge adita bilsirangona king king bala.
- Priprae balgipara, ja·pang ge·antini ga·tongrango bibalja indiba badiaba badiaba wa·gatongosan balaia.
- Badiaba ma·malni wa·arang bang-e balchimchima aro apsan somoion balchimchimigipa aro priprae balgipa ma·malrangba donga.

Wa·a ma·malrangni bibalani somoirangba dingtanga.

- Badiaba ma·malrang bilsianti bala ba ruutgija somoion bibala.
- Bang·bata bading·chiwalna miksonge ge·gipa wa·arang bang-e balchimchimigipa ong·a, aro ruuta somoirangni ja·manosa bibala aro pangnan apsan somoion bibalronga.
- Priprae bibalgipa ma·malrangba bibal bala indiba balrango gita ong·ja.

Bibalgenchim ong·oba biterang nangja aro bitchilrang ong·ja. Wa·a ma·malrangni kri bibalani bewalrangba dingtanga.

- Badiaba ma·malrang skanggipa changna aro chang·sa mangmang bite nangarian siaiaha.
- Badiaba ma·malrang bak dake sia, bite nangani ja·mano aro sigimin bakrangko gital tangatpila.
- Badiaba ma·malrangde sija indiba ong·rongbewal gita/ong·rongbewal gita ong·gija bibala aro bite nanga.

BITCHILKO GE-E JELROROATANI

- Bibal balchimchimgipa wa·arangni ja·pangrang apsan somoio sia.
- Priprae bibalgipa wa·arangni ga·tongrang, bibalgipa ga·tong ge·antian sigen; indiba ja·pangrangde sinaba ba sijanaba donga; kakketko agangenchim ong·ode ma·chong gital chataienba rakgipa aro mangrakgipa ja·pangrangko ong·katrikrikatgen.
- Priprae bibalgiparangni ja·pang gimikni, bang·bata ja·pangrangan sigen, indiba sigijagipa ma·malrangba donga; jeni ja·pangrangan sijawa indiba mangrakgipa ja·pangrangko ong·katrikrikatgen.

Wa·a bitchilko ra·ani, jakkalani aro chimonge donani rokomrang namen namkuja. Uarangko man·genchim ong·oba, namgipa rokomni aro tangna man·gipa bitchilrang ong·janaba donga aro uako u·ina gita man·ja.

Buringosa wa·arangko ge·na miksongahani gimin bitchilrangna simsakani komiaha; uarangko jo·ong·guk, do·orang, meserang aro gipin matburing dakgiparangna gale dona gita dakaiaha. Unagreba, ong·rongbewal gita ga·akgipa bitchilrang ruutgijan antirangni (anti 3-9) gisepon chana a·bachengbagnok. Unigimin, uarangko, man·a dipet ta·rake chimonge dona nanga.

Bitchilrang, uamangni tangna man·ani bilko dikdiksa somoinasan rakkina man·aia. Uarangko ran·gipa biapo jeon, bang·e chijimja, sosijimjimja aro bang·e sin·ja ba dingja dakgipa biapo dona nanga. Indake donanichi uarang adita somoirangna name donga. Indakgipa cholrangko namgipa skie on·ram biaprango ba laboratory·rangosan man·aia aro iarangko bang·e man·rongbreja.

BITCHILRANGKO CHIMONGANI

Jensalo minahaon, bitchilrang a·ona ga·aka. Bitchil dakna a·bachengbao, bitchilrangko ga·akatna gita wa·a bitongrangko morokroka. Indake dakanichi a·o ga·akgimin bitchilrangko kolome ra·ana bate name rongtale chimonge ra·na man·a wa·grimni samtangtango chagipa sam·bolrangko den·e aro itroke rongtalatgenchim ong·ode bitchilrangko chimonge ra·na altubata. Minggipinara ba·ra dal·gipa ba tarpaulinko bitchil ga·akchakna sigipa biapo andape dona man·a.

Kosako janapgiminrang gita dakna man·jagenchim ong·ode ga·akgipa bitchilrangko ruanchi choe rongtalatna nanga (mongsongbate chonchonggipa bitchilrangko), jo·ong aro gukrangko galna nanga aro a·mang aro moilarangkoba choe galna nanga.

BITCHILRANGKO CHIMONGE DONANI

Gital wa·a bitchilrang chimonge donsimgipa bitchilrangna bate bimik channinggenchim ong·oba, name dake bitchilrangko donani chal dakgenchim ong·ode uarang adita somoirangna tangani bilko rakkina man·a. Minggni chimonge donani bewalrangko nama ine nikaha: (i) ran·e chijimbreatgija donani (ii) ran·e chijimbreatgija aro sin·a·ding·aniko apsan rokomo donani.

Ia minggnini gisepo, skanggipa altubata, ia bijoliko man·jringna neng·nikgipa biaprangna nama. Gnigipan, jedakoba nambatgipa ong·aia.

RAN·E CHIJIMBREATGIJA DONANI

Bitchilrangko agre chijimbregijagipa biapo donanichi uamangni rang·sitaniko ka·sinata aro bri ning·aniko ruutata. Indakgipa dakbewalo, bitchilrangko skang ran·atchenga jedakode uarang chiko 8-10% mangmansan rakkina gita man·aigen. Uni ja·manode uarangko balwa jokna man·gijagipa aro calcium chloride (bitchilrangni jrimani bak chikkungni baksaona king king)-ko chipe dongimin plastikni botolrango chipe donaha. Ian bitchilrangko ran·ate dona gita ong·a. Agrepil·e ran·atani samko jakkalgenchim ong·ode ran·dugaangskanaba donga. Ge·e nina dongipa bitchilrangko botolo chipna skang silitingko ran·atani samni kosako donaha. Basakobade, balwa jokna man·gijagipa donchakanirangko ran·atimgipani kosako dona, ba bitchilrangko donram roomko ka·singipa balwa napbaaniko champengna gita maiaba bosturangko pate dona.

RAN·E CHIJIMBREATGIJA ARO SIN·A·DING/ANIKO APSAN ROKOMO DONANI

Bitchilrangni tangna man·ani bilara chijimana agreba sin·a·ding·anio pangchaka. Sin·a·ding·ani komianiara bitchilrangni rang·sitaniko ka·sinata aro tangani sal·somoirangko bariata. Unigimin, tangna man·ani bilko rakkina gita chijimani aro sin·a·ding·aniko apsan rokomo donanian nambatgipa ong·a.

Ge·e nina dongipa bitchilrangni kri, tu·gipa freeze ba ka·singipa roomko bitchilrangko chimonge dona gita jakkalna man·gen. 8-10% ona chijimatgimin bitchilrangko 10· - 14· C ong·gipa tu·gipa freeze-o donaha. Iana bijolini bon·changgiija teng·aniko nanga; sin·a ba ding·ani tangdoa aro tangona daksimaiani a·sel chi suuri pil·a arob jronga, uni giminba bitchilrangni janggi tanganiko namatja.

SIMSAKALSOANI

- Bitchilrangko ra·e aro uarangko tange dongna man·ani bilko gimaatjana gita chimonge dona tarigimin biapsona ta·rake ra·angna nanga.
- Namgipa bitchilrangko chimonge dona gita basee ra·na nanga.
- Dimita aro jo·ong cha·gipa bitchilrangko ra·na nangja.

BITCHILRANGKO CHIO DIME DONANI

Balchimchimgipa aro priprae balgipa wa·arangni bitchilrangko chimonge ra·ani ja·mano man·a dipet ta·rake ge·na nanga. Badita ta·rake ge·na man·a inditan bimikba naninga.

Chio dim·e donaniara bimik naaniko nambatata. Unigimin ge·na skang, bitchilrangko chio walsa ba konta 24-na dim·e donchina gita ge·eta.



BITCHILRANGKO JAWAIANI



Bitchilrangko jawaiani biapo, me-dikrango ba plastikni jalarango ge-e dona nanga. Bitchilrangko jawaiani biapo ge-aniara, bang-a bitchilrangko apsan somoio nirok-simsakna, chi runa aro a-salrangko on-a man-a. Unigimin, jawaiani biapo ge-china gita aganaha. Me-dikrango aro plastikni jalarango banggija bitchilrangkosan ge-na man-aia. Una agreba ge-a a-palrango ge-jolna man-a, indiba iarang bang-e nambreja aro u-ina gita man-ja.



Jawaiani biap chona aro a-ako chuata taria. Iano salakimko dakna nanga aro chi joke katna man-a gita chikare dongna nanga. Namgipa jawaiani biapni apalani 5 meter x 1.2 meter x 15 centimeter mang ong-na nanga. An-chengragaragipa biapoba bimik nana man-aigenchim ong-oba, a-mang, an-cheng aro a-salrangko apsan brinna nanga. Indake bringiminko 2 mm ong-gipa gitchehao mona nanga. Bitchilrangko bilding bildang satgija apsan ritingo ge-na nanga. Ge-ani ja-mano, a-mang bringiminko bang-gija bitchilrangni kosako puripripna nanga.



Gro: 5 meters, Gipeng: 1.2 meters, Chua: 15 centimeters

Bitchilrang ge-ani antisa ba uni gisepon chaagen. Wabi-sarangni chongroani 8-10 centimeter mang ong-kujana king kingde ba bijak ge-4-6 rang nakujana king kingde jawaigipa biapon donkuna nanga.

Indake dal-ani ja-mano, uarango pike plastikni jalarangni dal-ani - 6 x 8 inch ba 5 x 7 inch ba 4 x 5 inch ong-giparango wabi-sarangni dal-a ba chonani kri - ba uarango bang-e jelatna miksongenga ong-ode dal-roroe mangrakatani biap apalani kri wabi-sarangko ge-na nanga. Plastikni jalarango ge-gipa wabi-sarangna salanti chi rudapna aro salakim dake on-a nanga. Wabi-sarang feet 2-3 mang changroahaon uarango plastikni jalarango ra-ongkate ge-a-apalona ra-angna namaha.

Dal-roroe mangrakatani biapara gnigipa gadang ong-a aro ian jakkaltogipa gadang ong-a. Iano wabi-sarangna dal-roroe mang-rakchina gita somoi on-a aro wabi-sa namgijagiparango pike galna man-a.

WABI-SARANGNI DAL-ROROE MANGRAKANI

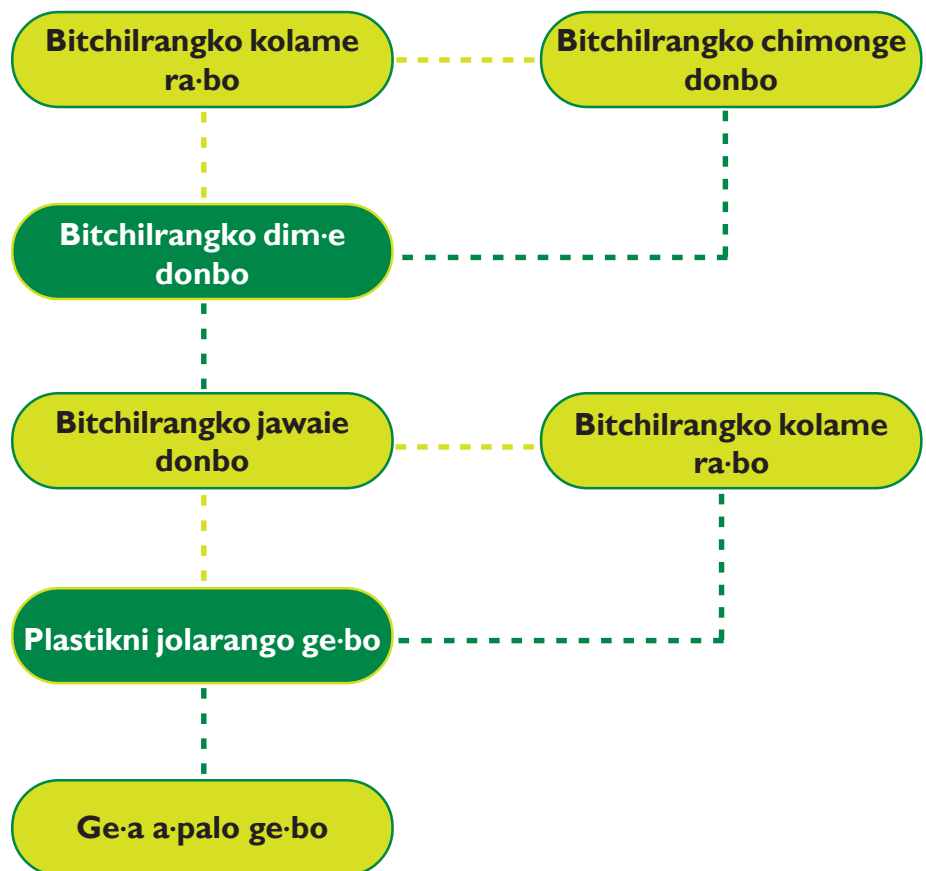
Namgipa wabi-sarangko dal-roroe mangrakatani biapni apalara 10 meter x 1.2 meter x 15 centimeter-rang ong-a. Groko bariatna gita man-a, bakroatna nangkuengode. Gipengkode 1.2 meter-an dona nangaia jedakode chi rudapna aro nirok-simsakna man-a gita. Ja-dil sikani biaprango bringimin a-mang, an-cheng aro a-salrangko apsan moe ge-ani biaprango gapatna nanga. Wa-a bi-sarangko 30 cms mang pangsa panggipinoni chel-grike srongsrong line dake ge-na nanga. Ge-ram biapko sal 15-na kingdingde salanti chi rudapna nanga aro uni ja-manode salsa watchange rudapna nanga. Salakimatani chek (75% gipa bazaar-rango palgipa chek)-ko ping-e dona nanga. Ja brini ja-manode, bite bang-e nangatna gita tarina namgnok.

MA·MALRANGNI GIMIN U·IATANI

Bading-chiwalna jakkalgipa wa·a ma·malrangni gisepo altubate man·gipa bitchilrangara *Dendrocalamus strictus*, *Dendrocalamus hamiltonii* (wa.nok) aro *Bambusa bambos* rangni bitchilrang ong·a. Ia ma·malrango bitchilrang bang·e ong·a, maina ia ma·malrang bilsianti bibal balsimsimaigiparang ong·a.

2004-07 bilsirango, *Melconna bacciferani* bitchilrang bibal balchimchimgipa biapranoniko bang·e man·a ama. *Bambusa nutans*, *Bambusa polymorpha*, *Bambusa tulda*, *Dendrocacalamus brandisii*, *Denorocalamus giganteus*, *Sschizostachijun dulloorangni* bitchilrangko ka·dongbeani dongja aro *Thysostachys Oliveri*-rangni bitchilrangko man·aba donga. *Bambusa bcalcooa*, *Bambusa vulgaris* aro *Oxytenanthera stocksii*-rang bibal balbreja aro balgenchim ong·oba bitchilrang ong·ja. Unigimin, indakgipa ma·malrangni bitchilrangko ra·ani gimin chanchina nangja. ■

BITCHILRANGKO GE·E JELROROATANI : MONGSONGGIPA JA·PANGRANG



■ WA·ARANGKO GE·E JELROROATANI

Wa·arangko ge·e jelroroatani ja·pangara bak dakani ong·a - wa·a bipangni nambatgipa aro mangravgipa bakko den·e ra·a. Ia bakrangara, ja·pang, gatong, cheksi, ba iarangoni ge·sa ba ge·gni ja·dilirang, biskurang aro gipin bakrang baksa man·chapa. Indake ge·anichi wa·a dambeko ong·atna man·a, jean uni mangrake dalgna mongsonggipa ong·a.

Wa·arangko ratonge ge·e jelatani kamara ma·pang gita tiktak daggipa wa·arangko ong·katatna man·a. Ia wa·a dambe jeonikon uni ja·pangko (ma·pang, ga·tong, ba cheksi) ra·e ge·ahachim ua ma·pangni pilak rokom·bewalrang gita daka. Indake ra·e ge·giparang ma·pang gitan ruuta bilsirangni ja·manosa bibal bala, uni gimin, aro uandaken bibalani ruutgija somoion siskaaiaha. Wa·a ge·e jelroroatani kamrango chu·sokgipa ong·na gitade wa·a bipangni gimik bakrang (ja·pang, ja·dilirang, ga·tong, cheksirang aro

**B. balcooa a.a bipangko
stong-stong jelatani**



Saa ding·a gri mangrakgipa aro brigipa wa·a bitongko basee ra·na aro jakkalna nangchongmota. Iako dakna gitade wa·ani bakrangni gimin aro uni dal·roroani gimin u·ina nanggen. Iani giminde songo noko donggipa manderang jemangan wa·arangko ge·e aro den·e jackal-rongbaengachim uamangsa ma·sia. Ge·ronggijagiparang aro wa·arangni gimin ma·sigijagipa-rangde namgipa wa·ako basee ra·na u·ijawa

bijakrang)-ni name silroro-dal·roroanian mongsonggipa ong·a. Ia bakrangoni bak ge·samangmang siljagenchim ong·oba wa·pang gimikan siljawaha

Ma·gitcham-pagitchamrangni ge·a-gamani bewalrangara bang·gija kamrangnasan jekai nokni nanganirangna aro game cha·giparangnasan ong·aia aro ka·mao janapatenggipa a·selrangni gimin ong·a.

- Ge·ani jelroroataniko dakna gita, wa·a dentonggiminko ra·bo aro ramram ratani bosturangko jakkalbo, kakketko agangenchim ong·ode altuen ia kamrangko ka·na gita chu·ongaia.
- Ia dakbewalrang koros komia aro namgipa ong·a.

Kakketko agangenchim ong·ode, wa·arangko badita ge·na nanggenchim, uarangni gimin skie on·anirang dongja, aro uandaken bang·e ge·na gita nangahaon ge·anirang chu·sokgipa ong·jaha.

- Hajira ka·giparangko nanga.
- Ja·pangko ge·na gita ra·anio (ja·pangrang, ga·tongrang) nangana batpile ratna nanga ba simsakbee be·atgija rate ba pike ra·na nanga.
- Pikmiting/ratmitingni somoio wa·arang ba wa·ani bakrang (ga·tong, ja·pang, bimikrang, cheksirang) nosto ong·naba donga. Pikani somoio aro biap ge·saoni ge·gipinona ra·jojoani somoio ja·pangni bimikrang nosto ong·genchim ong·ode jelroroatani kamo chu·sokgipa ong·na man·jaha.
- Wa·a jrimgiparangko biap ge·saoni ge·gipinona ra·na gita koros bang·e nanga. ■

**Jakkalrongbewal ratani
denani aro cho·ani
atle-gitchi**

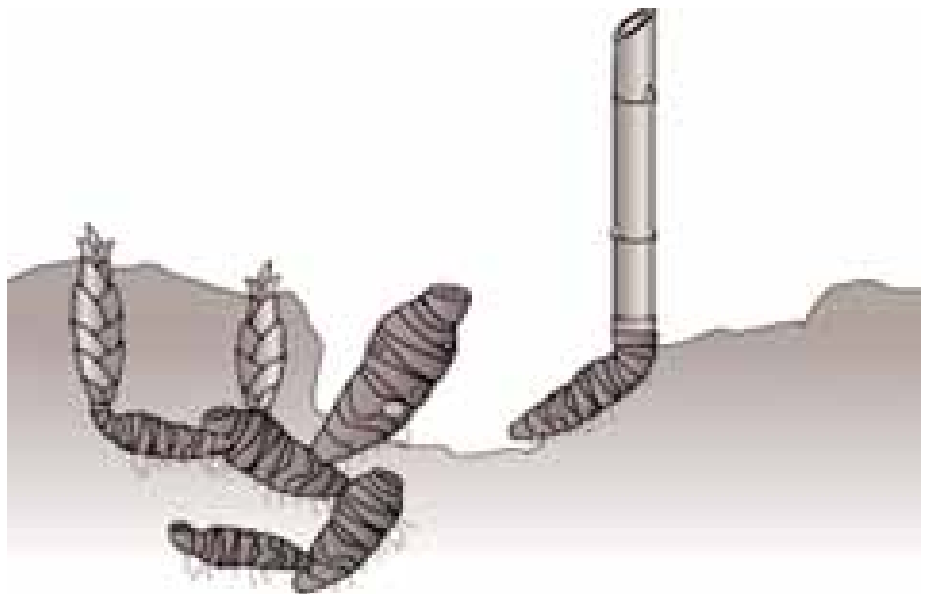


■ WA·AKO GE·E JELROROATANI: JA·PANGKO GE·ANI

Iako dake niaha gita aro bang·bate ge·anirangko dakaha gita, ja·pang ge·sako ma·pangoni den·e ra·ani ong·a, aro uako skatang dal·roro-silrorchina gita name nirok-simake donaha. Ia den·e ra·gimin, wa·a gital ong·nasienggipa pilak bakrangko ra·bita. Ia ja·pangko gipin bakrang baksa jekai, wabi·sarang, ja·dilirang aro ga·tongrang ming ma·ekate ra·na man·a.

Gipin bakrangko ge·a gita ja·pangko ge·e jelroroatani kamara, mangrakgipa aro brigimin ja·pangko ma·pangoniko den·e ra·anian ong·a.

Matsramgipa aro altuen matgipa ostrorangchi ja·pangrangko name simsake rate ra·na nanga. Ratmitingo name simsakna nanga, jedakode ja·pangrang jeon, wa·ani dal·roro-silroroani aro mangrakanina pangchakani ong·a, uarang nosto ong·jawa. Maikai ratna nanga uarangni gimin ka·mao janapatenga.



Ja·pangrangko pike ra·na gita namgipa somoiara February·oni April jarango ong·a. Ia somoio ja·pangni cha·ani·ringanirangko chimonge donani chu·gimik ong·aha. Iarang gital wa·bi·pangko ong·atna gita dakchakaha. Ia gipinode chimonggimin cha·ani·ringanirangko jakkalskagnok. Uni ja·mano, mikka wabahaon, me·arang nabaskaaha, aro uandaken cha·ani·ringa·nirangko me·a gital nabagiparangchina on·atskagnok

- Den·e ra·na gita ja·pangni namgipa bakko nikujana kingkingde ja·pango wilwile donggipa a·arangko ka·sine ka·sine cho·e galna nanga.
- Mang·rakgipa ja·pang rimita ba maram cha·a gita daka, aro a·mang rong gita gisime tok tok dakgipade wa·a nambregijaniko mesoka. Indakgipa wa·arangko ge·na gita ra·na nangja.
- Ja·pangni bimikrang aro ja·dilirang be·jana gita, ja·pangko ma·pangoniko gitok dakgipao ma·ekatna nanga. Jatchio ratongna nangja.
- Nangchongmotgipa bakko ma·ekatani ja·mano, wa·ani gipin bakrangko matskokatgija simsake ma·pangko a·mangchi pindape dona nanga.

SIMSAKSOANI

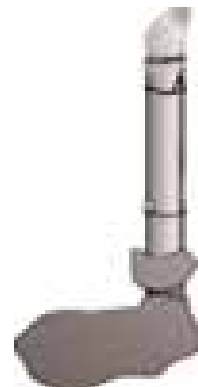
- Mangrakgipa ga·tongrang aro saa·ding·a grigipa wa·grim ong·ama ong·jama uako nichengna nanga.
- Ja·pangni bimikrang soama soja uakou·ina gitade bimikko ka·sine rim·jete nina nanga.
- Dal·dromiting somoio ja·pangrangko cho·e ra·na nangja. Bimik gital nagiminko den·e ra·genchim ong·ode wabi·sarangni tangani komia. Ian, indake ong·a je bimik gital nagipa dal·roro·silrorona cha·ani·ringanirangko ma·pangoniko man·jahani gimin ong·a.

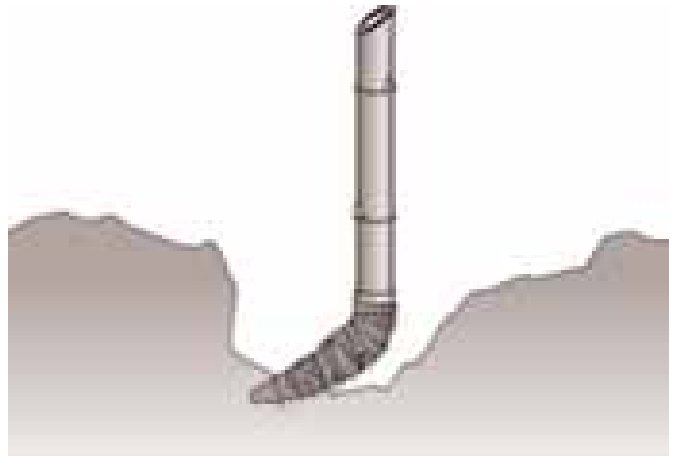
JA·PANGONI CHAGIPA WABI·SARANG

Ian dakbarongenga gita ja·pangoni chagipa wabi·sarangko ge·enba jelroroatani kam ong·a. Ian chu·soksranggipa kam ong·a, maina gital wa·ako ong·atna gita man·aha.

DAKGNIKAMRANG

- Bisku ge·gnimangmang ong·gipa wabi·sarangko cho·e ra·bo, kosakni ga·tongko den·e galbo. Mamingchiba katipna nangja.
- Ja·pang aro ja·dilirangko ta·rake chalja sosiachi katipe donbo. Den·e dongimin wa·arang ta·rake ran·inga. Ran·gnioniko champengna gita ga·tong kosakko plastikchi katipe ba rakgipa rongko nonge donbo.





Wabi-sarangko man-a dipet ta-rake ge-a a-pal ba ge-ram biapona ra-angna nanga.

- Ge-na skang, ja-pangko jo-ong cha-gijani sam, jekai Bavistin (1 gram/ litre) ba uandagipa jo-ongni samo dim-e donbo. Jo-ongrangni sam aro chiko apsan toe ra-na nanga, jedakode dam rakgipani sam indin gimaaijawa.
- Bang-e dal-bregijagipa wa-arang jekai, Bamnbusa balcooa aro Bambusa polymorpha wa-arangko a-palo ge-na gita a-kol 50x50x50 centimeter-mang tu-na nanggen. Chonchongipa ma-malrang jekai, Bambusa pallida aro Ochlandra travancorica-rangnade a-kol chonaan ong-aigen, aro wa-a dal-giparangna jekai, Dendrocalamus giganteus-na a-kol tu-kalna nanggen.
- A-kol chongipani a-mang cho-e galgipako a-sal ba farm yard manure (FYM-5 kgs) aro chemical ba samchi a-sal ong-atgipa (100 gms urea, 100 gms SSP aro 50 gm MOP) baksa brina nanga.
- Srongstrong ge-na nanga.
- Jamanchake ge-genchimode wabi-sarangko chaljarango ge-na nanga aro uarangko ge-ram biapo dona nanga

Ja-dil gnanggipa ja-pang

Indakgipa ge-anio, ja-dil gnanggipa ja-pangrangko bak dake, 50-60 cms-mang ro-ro ma-pangoniko den-e ra-a aro iano ge 10-15 biskurang donga.

Ia dakebawalo, bils 2-3 ong-gipa ja-pangrangko jakkalaniara, jensalo chel-gipa biapona ja-pangrangko ra-angna nangahaon indakgipa ja-pangrangko ra-a. Indake ra-na nangahaon ja-pango a-mang skapgipa-rangko chichie ba sugale galna nanga. Uni ja-manode uko ra-angna skang sosijimjingipa chaljao romrome dona nanga.

Indakgipa ge-aniara, sin-gipa biapni wa-a ma-malrangna namgipa ong-a. Indiani bang-bata wa-a ma-malrang ding-gipa biaprangosa chaani gimin indake ge-anirangko nikrongbreja aro ge-china gitaba agana dongja.



SIMSAKSOANIRANG

- Gitchinge den-gipa ga-tongko a-mangchi ripee dona nanga
- Ge-ani ja-mano sam buiringrangko pike galna nanga.

ARI BA CHAMPENGANIRANG

- Bang-gija wabi-sarangkosan ma-pang ge-prakoniko den-e ra-na nanga.
- Ja-pang bi-sarangko den-e ra-anio somoi cha-a aro koros bang-e ong-a.
- Den-miting somoio ma-pang aro ja-pangni bimikrang nosto ong-naba donga.

Ja·dilirang aro ga·tong gnanggipa ja·pang

Ia dakbewalo, bilsa sa ong·gipa namgipa ga·tongko nienba ka·magipa ga·tong baksa den·e ra·aha. Kosakgipa ga·tongkode den·e galaha, jedakode (komibeoba 4-6) biskurang aro bangki dongrikenggipa cheksirang ming bijakransan dongaignok.

Ja·pang ming Ga·tong.

Iano ja·dilirang aro ga·tong gnanggipa ja·pangko ge·e jelroroata ming apsan ong·aia. Iano dingtanggrikaniara pangchakgipa ba ka·mabatgipa ga·tongni baksaan rakkiaiaha.



- Ja·pangrang jrimnaba donga - *Dendrocalamus giganteus*ni ja·pang bi·sarangni jrimara 30-35 kilogramrang ong·a. Unigimin, uarangko de·e ra·na man·dika. Game cha·gipa mande ja·pang ge 2-3 kosan an·tangni wa·grimoniko chimonge donram biapona ba bajaro ripee ra·na man·aigen.
- Biap ge·saoni ge·gipinona ja·pangrangko ra·na gita koros bang·e nanga maina uarang jrima aro bang·e ra·na nanga aro name simsake katomna aro ra·angna nanga.
- Den·miting aro biap ge·saoni ge·gipinona ra·angmiting somoio ja·pangni bimikrang nosto ong·genchim ong·ode ge·e jelroroatani kamo chu·sokgipa ong·na man·ja.
- Ia dakbewal bang·e ge·ani kamko dakna gitade nambea ong·ja.

APSAN CHADIMGIPA JA·PANGRANGKO GE·ANI

Ia ja·pangko ge·ani kam ming apsan ong·aia. Iano dingtanggrikaniara ge 2-3 apsan chadimgipa ja·pangrangko ge·na gita cho·e ra·ani ong·a. A·oniko cho·e ra·miting somoio ge·sa ja·pangko ge·gipinoniko ma·ekatna nangja. Ja·pang ge·prakni ga·tongo bisku ge 3-4 ming bipek nabaenggiparangba dongna nanggen. Biap damsani damgipinosa ra·angengmitingo ja·pangrang nosto ong·jana gita simsakna nanggen.

Wa·chi kario ge·na gita nanga. Ge·na gita dongipa ja·pang ge·sana baten dongani gimino, ja·pang gimiko chakna gita a·kol dal·e cho·na nanggen. Indakgipa ge·e jelroroatani kamara, ba·gipa wa·ani ma·malrang jekai *Melocanna baccifera* (watre) aro *Schizostachyum dullooa*-rangna namgipa ong·a.

WA·A MA·MALRANGNI GIMIN U·ITANI

Ja·pangrangko bading·chiwalna miksonge ge·aniko dakna gita jakkalna man·a. Iarangara *Melacanna baccifera* (wa·tre) ong·a, jeni ja·pangrangko ge·anio bang·e chu·sokbrejaha aro uandaken uarangko ramram ge·jaha, aro *Bambusa bambos*-ko basakobasan ge·aiaha maina uni ja·pangko den·e ra·na gita altugipa ong·ja, mongsongbate nanggrikrike chagiparangko aro bu·su bang·gija ja·pangrangko den·e ra·na gita altuja. Indiba, maibakai den·e ra·na man·ode name dal·skaa aro *Bambusa bambos*-ba name dal·a.

Kan·dike skie on·ani ka·tapo janapgimin gita, ja·pangming ja·dilirang, ga·tong aro ja·dilirang, gnanggipa ja·pang aro ja·pang ming biapo chagipa wa·arangnasan janapaha, aro iarang ding·gipa biapni wa·arangnade namgipa ong·ja.

Apsan chadimgipa ja·pangrangko ge·ani dakbewalko mongsongbate *Melacanna baccifera* aro *Schizostachyum dullooa*-rangna tariaha. ■

JA·PANGKO GE·E JELROROATANI : MONGSONGGIPA JA·PANGRANG

Brigipa, mangravgipa
wa-grimko sandie ra·bo

Bilsi 1-2 ong-gipa
ga·tongko nie ra·bo

Ja·pangni a·mangko
galbo

Ja·pangko name nibo

Ga·tong kosako den·e
galbo

Ja·pangko den·e ra·bo

Ja·pangni wabi-sako den·e
ra·bo

Ge·a a·palona ra·angbo

A·kolrango ge·bo

RATONGGIMIN WA·ARANGKO GE·E JELROROATANI

RATONGGIMIN WA·ARANGKO GE·E JELROROATANI kamko dakna gita, ga·tong ba cheksirangoni jeba namgipa ge·ani bak ong·a, mongsongbate ding·gipa biapni wa·arangna nama, jerangan namgipa aro mangrakgipa wa·a bipangko ong·atna gita dakchaka. Ia bakrangara ga·tongni biskurang, mongsonggipa cheksirang aro ja·dilirang ong·a, aro iarangko dal·gipa aro chatgipa wa·ani ma·malrango nikna man·a.

GA·TONGKO DEN·ANI

Indakgipa dakbewalrang bang·a wa·a ma·malrangni ga·tongni biskurangoni ja·dil nana man·ani aro bimikrangoni wa·a bipang ong·na man·anio pangchaka. Ia dakbewalara ding·gipa biapni wa·arangna nama, indiba sin·gipa biapni wa·arangnade namja.

Ga·tongko den·e ra·anio komibeoba bisku ge·sa donge den·a nanga, indiba basakobade bisku ge 2-3 rang donge den·e ra·na man·a. Bilsi 2 na batgijagipa mangrakgipa ga·tongko rate ra·na nanga. Biskuni bimikrang aro cheksirangko rakkina nanga.

Ge·e jelatani wa·a pangprakan ja·dil naani somoirang gnang. Dingtang dingtang wa·ani ma·malrangan ja·dil naani dingtang dingtang somoirang donga, maina iarangni bimik nakatani aro cha·ani-ringanirangko chimonge donani somoirang dintanggrikani a·sel ong·a.

Wa·a bipangan me·arangko ong·katatna gita mongsonggipa ong·a. Cha·ani-ringanirangko chimonge donani aro ja·pangrangni kam ka·anio dintanggrikani a·sel dingtang dingtang chimonge donani aro ja·pangrangni kam ka·anio dintanggrikani a·sel dingtang dingtang jarango ge·na nangaha : nambatgipa somoiara bimik nachengna skang ong·a. March, April aro May jarangan den·e ra·na gita tariani nambatgipa somoi ong·a.

Samrangko jakkaljaoba, ia dakbewalko tik somoio jakkalanichi aro mangrakgipa wa-tongko ma-parangoniko den-e ra-anichi wa-arangko ge-e jelroroatna man-a. Indiba, sam-ara bimik chaningna gita dakchaka aro ge-anio chu-sokgipa ong-ata.

Auxins-rangara sam ong-a, jekon wa-arangko ja-dilrang aro ja-pangrangko chaatna gita jakkala. IBA (Indo Butyric Acid) aro NAA (Naphthalene Acetic Acid)-rangan jakkalbatgipa samrang ong-a; NAAko jakkalrongbreja maina uni kam ka-ani tik ong-ja. Auxinsna agreba minggipin samrang donga jekai, boric acid aro coumarin-rangkoba apsan kamna jakkala. Ia samrang dam raka aro unigimin simsake jakkalna nanga, aro sam botolo segimin gita tik on-a aro brina nanga.

DAKJNI KAMRANG

- Kosako den-e galna nanga, ga-tongni ku-chotko bakchoke den-a nanga. Ga-tong dal-ani aro roani apsan ong-gipako ra-na nanga.
- Stonggimin ga-tongni cheksirangko 5-10 centimetermang ro-e rasote galna nanga. Ga-tongo donggipa wa-mikko nosto ong-atjana gita simsakna nanga

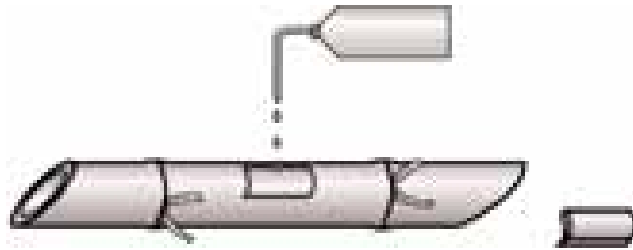


- Den-tonggimin ga-tongko chonchone stongna nanga. Bisku ge-saoni ge-gipinona ro-gipa wa-tongko bisku ge-samangmang done stongna nanga. Bisku ge-saoni ge-gipinona kan-dikgipa wa-tongkode bisku ge 2 ba ge 3 done stongna nanga. Bisku samtangtangoni centimeter 5-10 mang ong-e bakchoke den-a nanga. Stongmitingo wa-mikrang nosto ong-gipakode galna nanga.

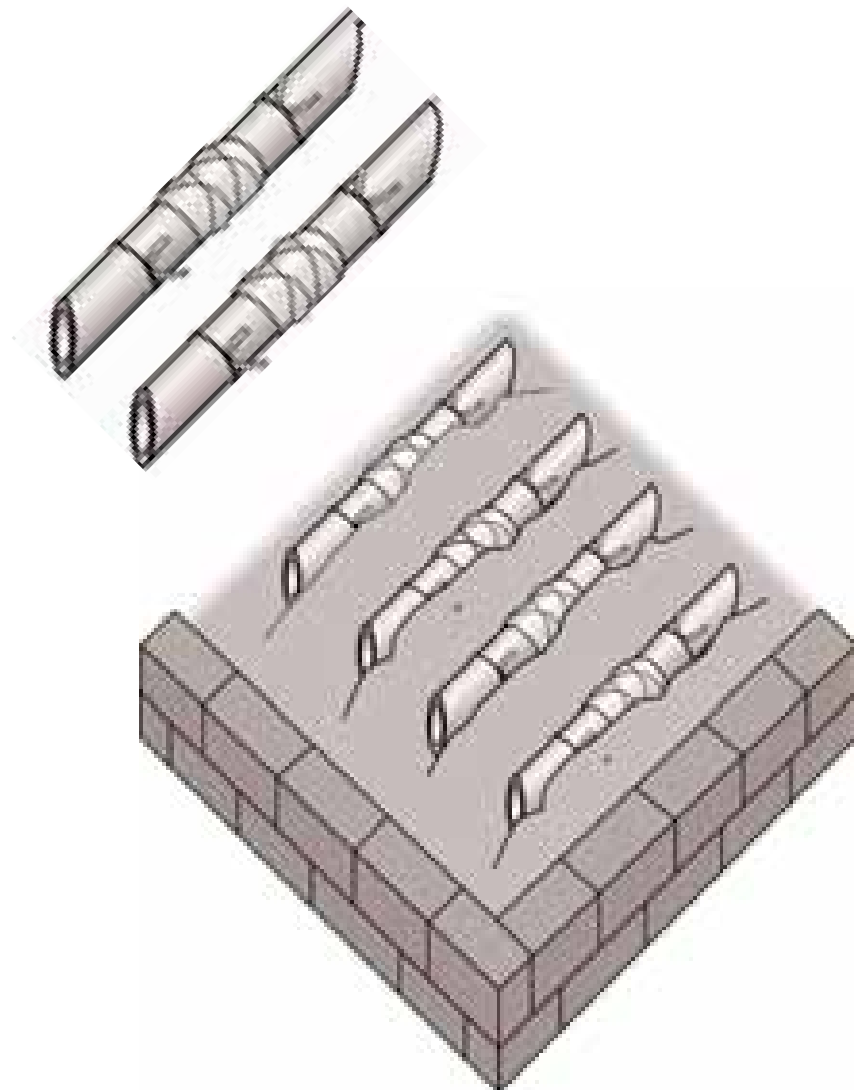


- Bisku ge-gni ba ge-gittam donggipa stonggimin wa-tongrangni bisku ge-gnini gisepgrikni jatchio a-kol puna nanga. Bimik naatani samko bang-gija (11-200 ml) ong-gipa jekai IBA (200 ppni jean 200mg/litre) ong-gipako a-kolo runa nanga. A-kol dal-genchim ong-ode ro-roe ratgipa plastikchi katipna nanga. Bisku ge-sasan ong-gipa wa-tongrangko konta 24 na samo dim-e dona nanga





- Ge·ani biaprangko 1 meter apale aro 5-15 meter gro-gipeng (biap bang·ani kri) ong·e tarina nanga. A·bachenge centimeter 10-15 mang chue an·cheng skakgipako anchengna nanga. Uni kosako an·cheng smitko 10-15 centimetermang chue anna nanga.

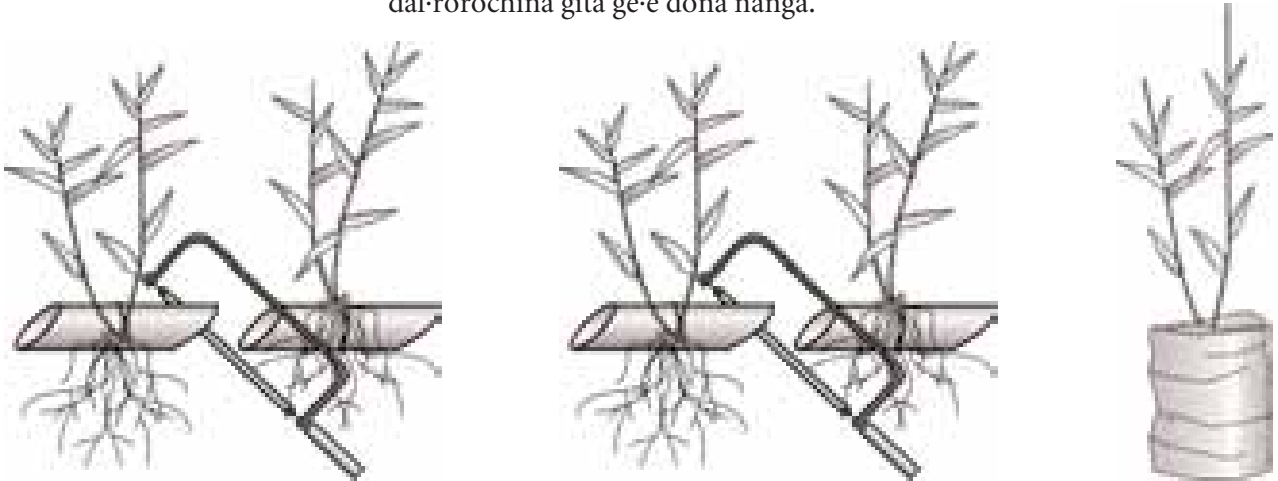


- Ge·na skang, wa·tongni ku·chot samgniko bringimin jo·ongni sam, jekai Bavistin (0.1%)-o dim·na nanga.
- Wa·tongrangko 15-30 centimetermang ge·saoni ge·gipinona chel·grike gitilate ge·na nanga, jedakode wa·tong ge·sani cheksirang ge·gipinoni chel·e donggen. Ku·chot chongipako a·mangchipak mikkange ge·na nanga aro uandaken wamikrangba a·mang nangchape dongaha.

A.rangipa biapode,
chararangko ge.jitna
dakjoljolna man.a. Iako dakani
miksonganiara chararangna
altue dal.rorona cholko on.a.

- Stonggiminko kosakni an-chieng smito aro 3-5 centimeter-rang ong-e an-ching skakgipani kosako ge-na nanga, aro uarangko 3-6 centimeter-rang ong-e an-cheng smitchi pindape dona nanga.
- Ge-ani biapo salakkim dakna nanga. Bajar-rango palgipa chek, jean 75% salakkim ong-atgipa chekko jakkalna nanga. Minggipinara ampangni nokko rike dona nanga.
- Ge-ram biaprangko salanti nanga gita chi runa nanga

Sal 10-15 ni gisepo bimik nana a-bachengbagnok. Jadil nana gita ja sa ba ja sa adha nanga. Ja-pang dakna aro me-a nana gita ja 4-6 rang nanga. Me-arang naahaon a-palo ge-na namaha ine mesokani chin ong-a. Ja-dil su-gimin ja-pangrangko cho-e ra-enba plastikni jolarango ge-e ge-a a-palrango ge-na ba dal-rorochina gita ge-e dona nanga.



SIMSAKSOANI

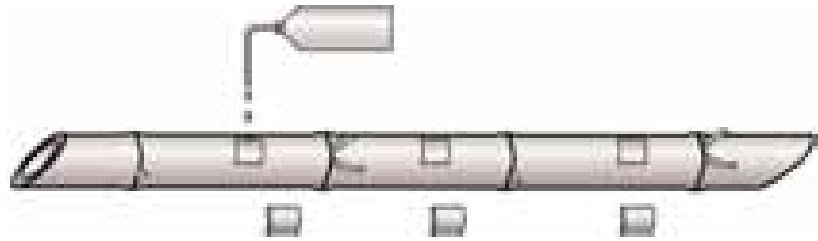
Stonggiminrangko ge-a a-palrangona ra-angna nangahaon, chi ran-gnioniko champengna gita ku-chot samtangtangko sosijimjimgipa chaljachi karomromna nanga.

ARI BA CHAMPENGANI

Wa-a gimikko man-gope, chatgipa, dal-gipa wa-a ma-malrang jekai, *Bambusa balcooa* aro *Dendrocalamus hkamiltonii*-rang indake ge-anirango namgipa ong-a. Bang-gipa aro chongipa wa-a ma-malrang jekai, *Melaconna baccifera* aro *Ochlandra travancorica*-rangde indake ge-anirango bang-gijasan chu-sokaiaha.

GA-TONGKO STONGANI : BANGSI GITA TARIE GE-ANI

Ia dingtang dake ga-tongko stonge ge-anikon 'bangsi gita tarie ge-ani' ine agana. Iano bisku ge-gni, bisku ge-gittam ba bisku bang-gipa ga-tongrangko tariha, aro chlorpyriphos 20% EC, Bavistin aro Streptocyclin-rangko ga-tongrango nongnonge donaha. Biskuni gisepgriko 1x1 inch ong-e a-kol puaha aro chiko a-kolo ruataha. A-mang napjana gita a-kolko plastikchi katipe donaha.



- Dongge ge·prakko inch 6 mang tu·e (wa·a roani kri) aro inch 36 mang chel·e tariaha. Ia donggerangko a·kin cha·gnioniko champengsona gita chlorpyriphos 2 ml/1 chiko rue donaha.
- Bisku gnanggipa ga·tongrangko donggerango April - May jarango ge·aha aro inch 2mang ong·e a·mangchi pindape donaha. Wa·a ning·ao chini ding·ani aro chigadoani gimin sal 10-20 ni gisepon bimik chana a·bachengaha. A·palo ge·na gita sal 60-80 ni gisepon ja·dilrang/ ja·pangrang chaaha/dakaha.

CHEKSIRANGKO DENCHOKE RA·ANI

Chatgipa wa·a jatrang *Bambusa balcooa*, *Dendrocalamus asper*, *Dendrocalamus hamiltonii* jerangon mongsonggipa cheksirang donga, uarangni cheksirangko rate ming bang·e ge·na gita man·gen. Uarang chonchonani gimin, uarangko ma·pangoniko nosto ong·atgija name rate ra·na man·a aro uandaken uarang ge·na gita namgipa ong·a. Cheksirangni pangchakgipa ming ga·tongni ja·pangrang apsan daka. Indake dotgimik dal·gipa ja·pangrangsa ge·anio chu·sokgipa ong·a ine nikaha. Skatang ja·dil chagimin aro japang dakgimin cheksirangan (jekon ja·dil chasogimin aro ja·pang daksogimin cheksirangko rate ra·ani ine agana) denchoke ra·gipa cheksirangna bate nambata. Ga·tong kosako rasote gale aro ma·pangoni gital ga·tong nabagiparangko rate galanichi ja·dilrang aro ja·pangko name dal·roro-silrorochina gita dakchaka.

DAKGNI KAMRANG

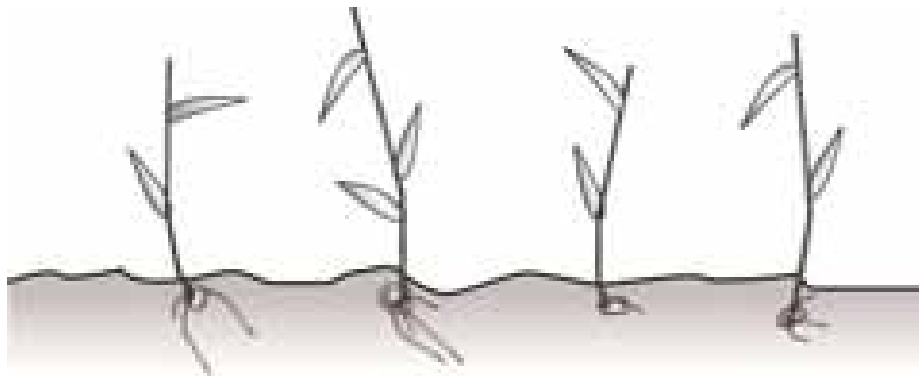
- Bilsisa adha aro bilsa gni ong·gipa aro sabisi grigipa bipekrangko basee ra·bo.
- Bipekrangko ja·pang dotgimik dal·gipa aro ja·dilrangming ja·pango korat bi·sachi rate ra·bo.





- Ja-pang name rongtal pil-e bipekrangko rate ra-na nanga. Indake dakna gita ga-tong kosakko rate gala gita ka-makoba rate galna nanggen.
- Bijakrangko, chongipa cheksirangko aro cheksirangni ku-chotrangko rate galemang bipekrangko rate ra-bo. Rasotgimin ge-prako ge 2-6 biskurangming namgipa wa-mikrangba dongna nanggen, aro uni ro-ani 50-80 centimeter-rang, wa-a jatni kri ong-na nanga. Bon-kame rasote galanikode ge-ram biapo dona skangmangmang dakna nanga.
- Rasotgiminrangko ja-dil chaatani sam (jekai Indole Butyric Acid ba IBA 200 ppm ong-gipa)-o konta 24 na dim-e dona nanga.
- Ratani ku-chotko ste nonge dona nanga
- Rasotgiminrangko ge-na skang chimung bringimin jo-ongni sam jekai Bavistin (0.1%)-o dim-na nanga.
- Rasotgiminrangko, 2-3 centimeter-mang ong-gipa ge-ram biapo srongsrong ge-na nanga, aro 7-10 centimeter-mang tu-e ge-na nanga aro a-mangko rake sin-jete dona nanga. Ge-ram biapo a-mang, an-cheng aro FYM bak 1:1:1 dongipa ong-na nanga.
- Salanti sositna aro salakim ong-atna gita tarie dona nanga.

Sal 7-10 ni ja-mano bimikrang chabagnok. Namgipa ja-dilrang sal 30-60 ni gisepo ong-kata (April - August jarango rasotgiparang) ba sal 55-70 ni gisepo ong-kata (October - November jarango rasotgiparang)



- Rasotgiminrangko ja-dil su-ani ja-mano ge-ram biaponiko pike ra-e uarangko a-dipek aro matchu ki-I bak 3:1 donggipa plastikni jolarango (15x23 centimeter) ge-na nanga. Rasotgiminrangko sal 3-5 mangna salakimo done rakatna nanga. Gital bimikrang ja 6-8 rangni ja-mano ong-kata aro uni ja-mano wabi-sarangko a-palo ge-na namgnok.
- Bite bang-e nangatani kamko cheksirangko rasote ge-ani kamrangming apsan meligrike ge-na nanga, jedakode bang-e wabi-sarangko ong-katatna man-gen.



SIMSAKSOANIRANG

Rasotgiminrangko ge·ram biapona ra·angna nanggenchim ong·ode, uarangko chijimate dal·gipa chijimgipa chaljarango ba plastikrango chijimgipa bol biginchirangming chi ran·gnioniko champengna gita dona nanga. Wabi·sarangko ge·gipa plastikrang name chi joke katna man·a nanggen, jedakode wabi·sarang sojawa.

Bimik nae dal·ani somoirangko komiatna ja·dil chagimin aro ja·pang dakgimin bipekrangko ra·na nanga.

ARI BA CHAMPENGANI

Wa·a ma·malrang jerangan ga·tongni ku·choto chonchongipa cheksirang donggipa jekai *Thyrostachys oliveri* aro *Thyrostachys siamensis*-rangko indake ge·achi jelroroatna man·ja.

MA·MALRANGNI GIMIN U·IATANT

Da·ode bang·bata ma·malrangkon cheksirangko rateming ge·anirangko dakengaha. *Thyrostachys oliveri* aro *Dendrocalamus strictus* ni bang·gija bakrangna agrede, maina uarangni wa·kolrang chona, gipin ma·malrangko cheksirangko rate ge·anirangko dakengaha.

Je ma·malrangan cheksirangni pangchakgipa biskurangoni ja·dirang aro ja·pang ong·baa uandakgiparangni cheksirang rate ge·anirango chu·sokgipa ong·a. Ga·tongni ku·chotko rasote galani ja·dil aro ja·pang gital nabagiparangko bilakatna man·a. Cheksirangko rate ge·anio chu·sokgipa ma·malrangara, wa·a chatgipa jekai, *Bambusa balcooa*, *Bambusa nutans*, *Bambusa polymorpha*, *Bambusa vulgaris*, *Dendrocalamus giganteus* aro *Dendrocalamus hamiltonii* ong·a.

Bangsi dake tarie ge·aniko mongsongbate *Bambusa balcooa* aro *Bambusa nutans*-rangna tariaha. ■

RATGIMINRANGKO GE-E JELROROATANI : MONGSONGGIPA JA-PANGRANG

Gatongrangko ratani



Cheksirangko ratani



■ WA·AKO KOLOM RATE JELATANI

Dintang dintang gadango ge·ani rokomrangara, ga·tong ba cheksiko ja·dil chaatgipa baksa nangrimatani ong·a jedakode wabi·sarang chagen. Iako ge·ani kamara rate ra·animing apsan ong·aia. Dintang dintang gadango ge·ani rokomrangora, ga·tongko ma·pangoniko ma·ekatgijan ja·dilirang ong·kata. Ga·tong ba cheksiko ja·dil naatna gita tarigimin biapo gopani ja·mano ja·dilirang chaaha aro uandaken gital wa·a ong·aha.

Indiao dintang dintang gadango ge·ani rokomrangko dake jelroroatani kamko basakobasan dakaia indiba bang·bata salon dakraongbreja.

Dintang dintang gadango ge·ani rokomrang rokom bri donga :

- A·o ba ramram tuate ge·ani
- Ga·tongko ge·songani
- Dingonate ge·ani
- Wabi·sarangko ge·ani

Ja·dil chaatgipara bostu mingsa ong·a, jeon wabi·sarang ge·ram biapona ra·angna skang mangraksona man·a. A·palni a·mangrang namgipa ja·dil chaatgipa ong·ja. Ia a·mangrang chi nangahaon bilongen ma·keta aro sabisi man·a altubea. Ja·dil chaatgipa, wa·tongko name mangrakatna nanga. Rate ra·gipani ja·pango balwa man·gipa aro namen sosijimjimgipa ong·na nanggen. Jo·ongrangko siatgimin a·mangrang, wa·tongko sabisi aro saa man·gnioniko champengna gita dakchaka. Jakkalronggipa ja·dil chaatgiparangara gama·ge·anio jakkalgipa bosturang ong·a jekai - narikel bisring aro cha·che, me·gap, bijakrang - matchu ki·i, an·cheng, sogimin sam bijakrang aro a·rima.

WA-AKO KOLMO RATE JELATANI

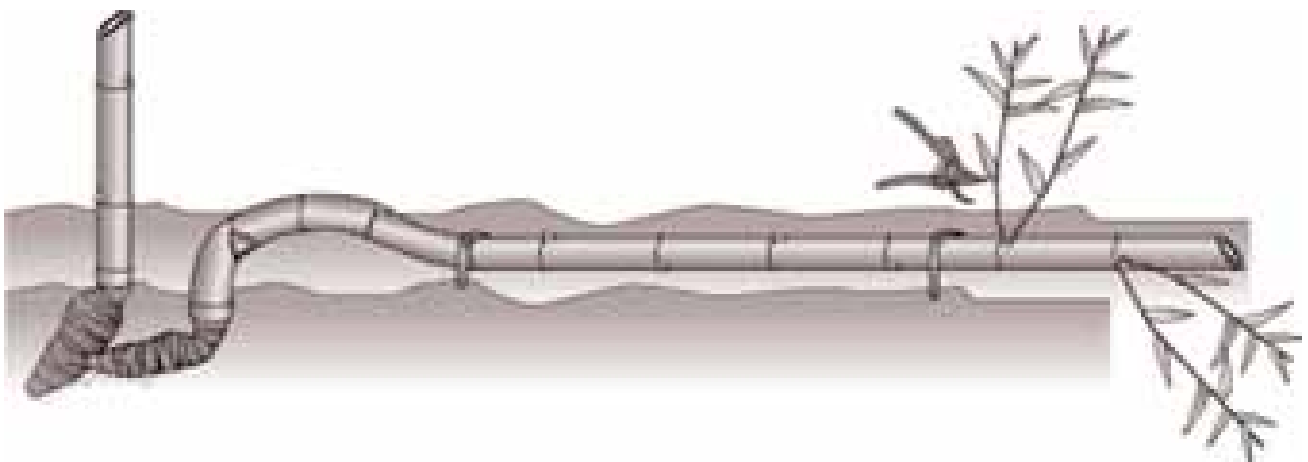
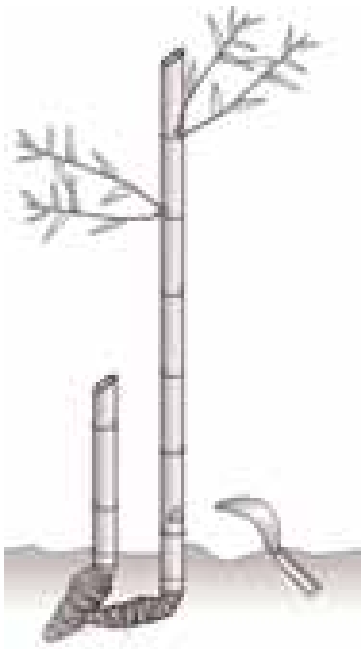
- A-o ge·ani aro ga·tongko ge·anio an·chengming narikel cha·che, ba matchu ki·iming an·chengko namgipa ong·a ine nikaha.
- Narikel bisring, am aro a·rimarang balwa nangate ge·anina namgipa ong·a ine nikaha.

A·O GE·ANI

Indakgipa ge·anio, jensalo ga·tong a·mango nangahaon ja·dilirang chaa.

DAKGNI KAMRANG

- Dambe (bils 2 na komigipa) aro brie mangrakgipa aro sabisi grigipa ga·tongko ma·pangoniko basee ra·na nanga.
- Donggeko agre tu·kalgija chona nanga (10-12 centimeter tu·e), bisku ge 5-6 donggipa ga·tongko chakna gita roen cho·na nanga.
- Ga·tong kambeko densote galna nanga. Indake dakanichi biskurango wa·mikrangko chaatna dakchakgen.
- Kosakgipa biskurangni cheksirang aro bijakrangko (komibeoba 5-6 biskurangni) dona nanga aro ka·mabatsranggipa ge 4-5 biskurangni cheksirang aro bijakrangko chu·gimik dona nanga. Bangki biskurangni cheksirang aro bijakrangko aro chonchongipa cheksirangkoba rasote dona nanga.
- Ga·tongko a·ona salgomna nanga. Altue gamjagenchimode ja·pangni sepangob chone den·a nanga. Ga·tongo rimeming dongge cho·gipaona salgomna nanga.
- Donggeo dongipa ga·tongko ja·dil chaatgipachi pindapna nanga. Gopgimin ga·tongni biskurang a·mango nanganichi chaana gita dakchakgen.
- Salanti chi rudapna nanga, indiba agre pile runa nangja. Chi skongode wa·pangko nosto ong·atgen.
- Ja·dilirang biskurango chaa. Iarangko name chang ni chang nirokna nanga.



- Jensalo ja·dilrang chaahaon, ja·dil su·gimin biskurangko, biskuni samtangtango 7-10 centimeter-rang done rate ra·na nanga.
- Ja·dil su·gimin bisjkurangko ge·ram biapo ba a·palo ge·na nanga.

GA·TONGKO GE·SONGANI

Indakgipa ge·anio, ga·tongko bisku ge 2-3 rang doneming rate ra·a. Ga·tongko 200 ppm (20 gmko 100 litre chiming brinaha) IBA, aro pindape donan baksana ja·dil chaatgipa samchi 1-2 centimeter-rang chate katipe donaha. Bimikrang sal 15-180 rangni ja·mano chaa aro uarangko rate ra·na aro ge·na nanga. Indakgipa ge·ani rokomara Bambusa longispiculate-nasan chu·sokgipa ong·aia ine nikaha.

DINGONATE GE·ANI

Iana bilsisa ong·gipa ga·tongko basee ra·aha aro uako ja·pango rateming gomata, jedakode gimik biskurangan jaksokao ong·gen. Ga·tongko rakgipa sing·kamchi sing·chake donaha aro biskurangni cheksirangko 203 centimeter-rang ro·e rasote donaha. Ia cheksirangko rasotmitingo wa·mikrang nosto ong·jana gita simsakna nanga. Kamberangko March-May jarango rasote galna nanga. A·mangming sogimin bijakrangko (bimik chaatani a·sal) bisku ge·prako duule donaha. Iako sronge narikel bisring ba amchi romrome donaha, aro buduchi ku·chot ge·gniko kae donaha. Jasani gisepon ia wa·mikrang me·arang ong·baskaaha. Ja 3-4 ni ja·manode ja·dilrang nabaaha. Uni ja·manode a·palo ge·na gita ma·pangoniko ma·ekataha.



Kolom ratna salgoma

WA-AKO KOLMO RATE JELATANI

Kae dongimin bimik chaatani a-sarangko sosiatsime dona gitade, wachi kario nambata. Ia dakbewalara chatgipa wa-arang jekai, *Bambusa Vulgaris* aro *Dendrocalamus giganteus* jerangni cheksirangan mangraka aro gota dakgipa ja-pangrangna nambata.

WABI-SARANGKO GE-ANI

Ia 6-12 ong-gipa wabi-sarangko a-sal gnanggipa an-chengo apsan donaha. Ga-tongrangko 1.5-2.0 centimeter tu-e gope donaha, indiba biskurangni cheksirangkode kosakchi chadochina gita wate donaha. Ia gadango, bang-bata wabi-sarangan ga-tong ge 3-4 rang dongaha aro biskurang ge 6-8 dongaha. April-May jarango ge-genchimode sal 60-90 mangni gisepo biskurango ja-dilrang ong-kataha. Wabi-sa gital nagiparangko ken-chi dakgipa silkepchi rate ra-aha, aro uarangko a-dipek, an-cheng aro matchu ki-I bak 3:1 donggipa plastic rango ge-aha.

Ia dakbewalara *Bambusa polymorpha*-na namen namgipa ong-a, indiba *Bambusa bambos*, *Bambusa tulda* aro *Dendrocalamus strictus* rangnade nambrea ong-ja. Ia dakbewalo on-tisa neng-nikani donga aro uandaken wa-a dal-gipa ba ja-pango bing-e chagiparangnade nambea ong-ja. Iara ja-pango jelroroatna gita tarianiko nanga, jekon bang-e ge-anirangko dakna gita namgipa ong-ja.

MA-MALRANIGNIGIMIN U-IATANI

A-o ge-na gita *Bambusa bambos*, *Bambusa nutans*, *Bambusa polymorpha*, *Bambusa tulda* aro *Bambusa vulgaris* namgipa ong-a.

Dongone ge-an iko bang-a ma-malrangko dake nina gita man-a, jekai, *Bambusa bambos*, *Bambusa nutans*, *Bambusa tulda*, *Bambusa vulgaris*, *Dendrocalamus brandisii*, *Dendrocalamus giganteus* aro *Dendrocalamus hamiltonii*, aro una agreba *Schizostachyum dullooa*-koba ge-e nina man-gen.

Wabi-sarangko ge-anio *Bambusa polymorpha*-na namgipa ong-a, aro *Dendrocalamus giganteus*, *Dendrocalamus hamiltonii* aro *Melaconna baccifera* rangnaba nama. ■

**DINGONE GE·E JELROROATANI : MONGSONGGIPA
JA·PANGRANG**

Brigipa, mangrakgipa
ma·pangko nibo

Bilsi 2 ong·gipa
ga·tongko ra·bo

Donggerangko taribo

Ga·tongni kambeko
den·sote galbo

Cheksirangko rasote
galbo

Ga·tongko pe?e
salgombo

Donggeko bimik chaatani
a·salchi pindapbo

Ja·dil su·gimin
biskurangko stonge ra·bo

Ge·ram biapo ge·bo

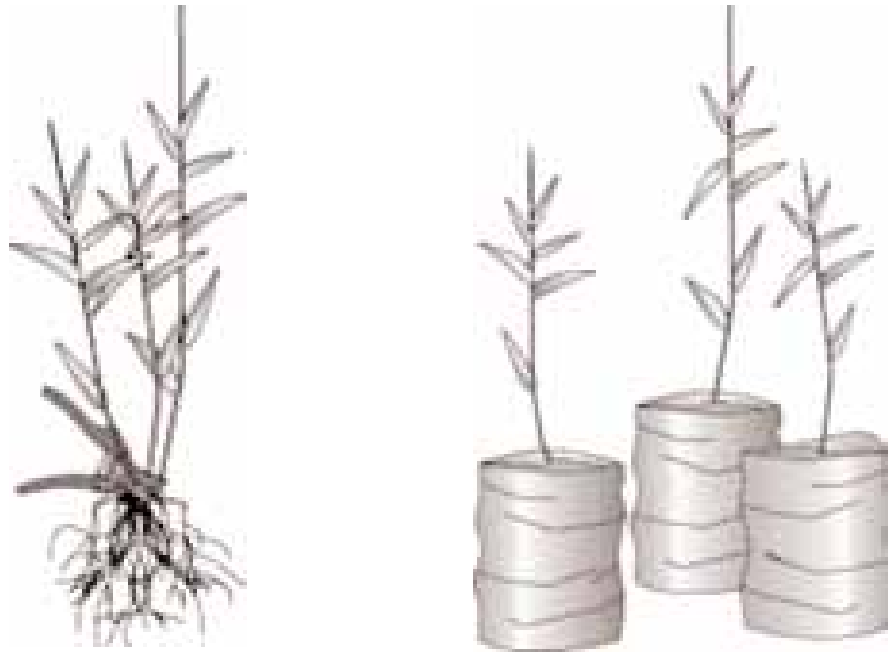
■ WA·BISAKO BAK KA·E JELROROATANI

WABI·SARANG bite nangna man·gipa ong·a. Ja·pang ge·prakprako ja·dilirangming aro wabi·sarangming rate ra·e ge·anichi bang·a wa·pangrangko ong·atna gita man·a. Iako dake nianio bitchil chaagipa ma·malrangnasan namaia ine nikaha.

DAKGNI KAMRANG

- Bitchilrangko jawaina tarigimin biap jeon a·mang, an·cheng aro FYM·ko bak 1:1:1 dake brine dongimin ge·na nanga.
- Wabi·sarang bijakrang ge 2-3 naahaon (8-10 centimeter changroahaon) pike ra·na nanga; uarangko an·cheng, a·dipek aro matchu ki·i·ko bak 3:1 dake bringipa plastikni jolarango ge·na nanga.
- Ja 4-ni ja·mano ba wa·pek ge 3-4 rang naahaon cho·e ra·na nanga. Ja·pangko nikna gita a·mangrangko galna nanga.
- Wabi·sa pangprakko gitdok dakgipa ja·pango rate ra·na nanga, jedakode pangprakan ja·pang aro ja·dilirang donggen.





Bimik nae chagipa wa·arang ja 4ni gisepo tanggipa ja·pang, ja·dil aro wabi·sarang ong·na man·a. Bite nangatna gita rate ra·gimin ga·tong aro cheksirang bang·e wa·pangrangko ong·atna man·genchim ong·oba route somoi·rangko nanga - bilsisana bate nanga.

- Kambe ro·aniko champengna gita aro bang·e wabi·sarangko ong·atna gita ge·gni biskurangko donari kambeko rasotna nanga.
- Rate dongiminrangko Bavistin (0.1%) samo ge·ram biapo ba plastikrangko ge·na skang dim·e dona nanga.
- Rate ra·giminrangko ge·ram biapona ra·angna skang ge·taina, chi rudapna aro sal 3-5 na salakkimo done rakatna nanga.
- Bite nangatna gita tarigimin wabi·sarangko a·palo ge·na gita 50% mang tarie dona nanga. Bangkirangkode gital wabi·sarangko ong·katatna gita jakkalna man·a.

Ga·tongrangko aro cheksirangko rateming wabi·sarangko tarigipakoba apsan rokomo ge·eming bite bang·e nangatna gita man·a. Dal·dromiting somoion bang·e bite nangatna gita tarina nambatgipa ong·a.

SIMSAKSOANIRANG

- Ia dakbewalko jelroroatna gita ruuta somoirangna king king jakkalgenchim ong·ode, brigipa/bibal balgipa wa·pangrangko ong·atgen.
- Unigimin a·bachengon bitchilko ge·ani bosturangko ma·pangoniko ra·na nanga.

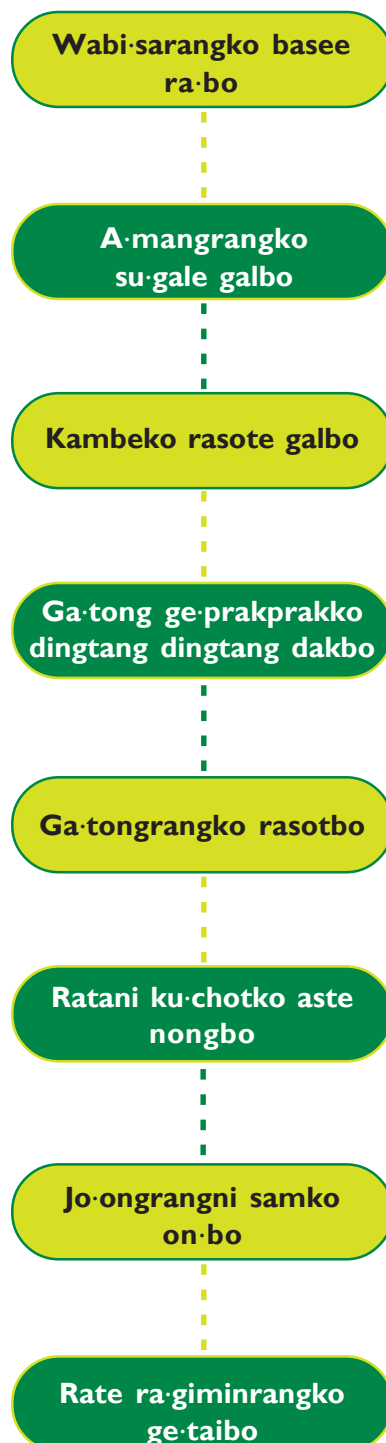
ARI BA CHAMPENGANI

Ia dakbewalna chatgipa, dal·gipa ma·malrang jerangni bitchilrangan chagenchim uandakgipa ma·malrangna nambata. Ba·gipa ma·malrang jekai, *Melaconna baccifera*, *Ochlandra travancorica* aro *Schizostachyum dullooa* - ranged 20-25% san namaia.

MA·MALRANGNI GIMIN U·IATANI

Chatgipa aro dal·gipa ma·malrang jerangan tanggipa bitchilrangko ong·atgipa ma·malrangna ia dakbewal namgipa ong·a. Namgipa onkatamrangko *Bambusa nutans*, *Dendrocalamus giganteus* aro *Dendrocalamus hamiltonii* - rangoniko man·aha.

BITERANGKO BANG·E NANGATANICHI JELROROATANI:MONGSONGGIPA JA·PANGRANG



JELROROATANI DAKBEWALRANG: MAN·DAPANI CHOLRANG ARO MAN·DAPGIJANI CHOLRANG

Dingtang dingtang jelroroatani dakbewalrangko janapgiminrango man·dapani cholrang aro man·dapgijani cholrang donga. Iarangko ka-mao me-sokatenga.

Dakbewal	Man·dapani cholrang	Man·dapgijani cholrang
Bitchil	Ong·telaigipa, namgipa, dam rakgipa, bang-e man·a gita namgipa ong·a	man·rongbreja aro bitchilrang bang·ja . Badiaba ma·malrangna bitchilrangko tarina gita u·ija. Bitchilrangko chimongani, donani aro jakkalanirangko name dakja. Bitchilrang tangama tangjawa u·ija. Wa·pangrangni dingtang dingtang kam ka·ani
Wa·pang : Wa·pang gitalrang, wa·pangni bak	Ma·gitcham·pagitchamrangonin u·iaha aro dake nie chu·sokgipa ong·a. Wa·pang gitalrang : Ding·gipa biapni wa·arangna nama wa·pangni bak : wa·tong ba·gipani nama	Bang·e ge·na gita namja. Bang·gija ja·pangrangkosan chadimamoniko rate ra·na man·a. Wa·jating dal·dala aro biap damsaoni damgipinona ra·na koros bang·e nanga. Gipin ge·ani bosturangna bate ja·pangrangna dam rakbata. Somoi bang·e nanga, kam ka·giparangko bang·e nanga.
Ga·tongko rate ra·ani aro bangsi dake tarie ge·ani	Ramram aro altue jakkalaha. Chatgipa, dal·gipa ma·malrangna namgipa ong·a. Altue man·a aro den·e ra·na altua. Bangsi dake tarie ge·ani : Seokgimin ma·malrang aro ding·gipa/ran·gipa biapna namgipa ong·a.	Bisku ge·saoni ge·gipinona ro·gipa wasingrangna aro ba·gipa wa·arangna namgipa ong·ja.
Wa·cheksirangko rate ra·ani	Damni kri name, bang·e ong·atna gita nama; wachi·a·rak dongja. Chatgipa ma·malrangna namgipa ong·a	Ba·gipa aro cheksi chonchongipa ma·malrangna namja.
Salgome a·o ge·ani	Ge·samgipa wa·jatingrangna nama	Kam ka·giparangko bang·e nangja; ma·pangni duuulao a·dap ong·na nanga.
Kolom ratani	Ge·sangipa wa·jatingrangna nama	Kam ka·giparangko bang·e nanga; Bang·bata a·palrangko nirokna man·ja.
Wa·bi' sako kolom ratani	Bang·a bilsirangna wabi·sarangko ong·ata; biap damsaoni damgipinona ra·rurana altua/ dam komia	Somoi ruutahaon ge·ani gamchatani komianga; gital wabi·sarangko nanga.
Wa·bi' sako bakka' ani	Damni kri nama; bang·e jelroroatna gita nama	Somoi ruutahaon wa·ani gamchatani komianga; gital wabi·sarangko nanga.

■ WA·ABI·SA CHAATRAM BIAPKO TARIANI ARO NIROK-SIMSAKANI

CHAATRAM BIPAKO DONANI

Wa·arangko jelrroatna gita dintang dintang kamrangko dakna man·a, noksamrango aro bang·gija ge·anichi a·bachenge, aro bading-chiwalna gita tarigimin ge·ram biaprangona ong·a, jeon ritichani riticha aro una bateba hajalni hajal wabi-sarangko ge·e tarina gita man·a.

Chaatram biapko tariani mongsonggipa ja·pangrangara:

- Kamrangko tik dake donani
- Ge·ani bewalrangko u·ie ra·ani
- Ge·ani wa.arangko u·ie ra·ani
- Chaatram Ge·ram biapko seoke ra·ani
- Chaatram Ge·ram biapko seoke ra·ani
- Chaatna chanchiasoani aro biapko tariani
- Jelatani kamrangko nirok-simsakani
- Jo·ongrang aro sabisirangna simsaksoani

KAMRANG

Kam bang·a-bang·gijani giminde bazaro pangchakgen ba tarigimin wa·arangko jakkalanio pangchakgen. Ian somoi gita man·dapani donggen aro kamrangko chalaigipa aro dakchakani cholrangkoba man·a nanggen. Kam ka·anirang bang·jagenchim ong·ode, ba dintang dintang somoirango ba biaprango ong·genchim ong·ode, namgipa ge·ani kam-bewal aro nirok-simsakaniko dake niengmitingo bang·e man·dapani kamrangko dakna nangjawa maina uarangko jakkalgipa donaigen. Bang·e ge·na miksonggenchim ong·ode ge·ram biapko tarina gita name chanchisamsona nanga, aro gimikni gitan name daksona nanga.

JELROROATANI DAKBEWALRANG

Iano seoke ra·ba gita bang·a dakbewalrang donga. Dakrongbewal gita, seoke ra·aniara iarango pangchaka :

- kam ka.anigadang,
- Jelatani ma·malrang,
- ma·pangko/ge·ani bosturangko man·ani,
- Charam biap bajaroni ba ge·a a·paloni chel·a·chel·jani.

Mongsongbate wabi·sarangko ge·aniko dakanio mingsana bate dakbewalrangko dake nina nanga aro ge·giparangna skie on·a aro changgipa-saggipa ong·atna nanga.

GE·ANI BOSTURANGNI JA·PANGRANG

Namgipa ge·ani bosturangko nie ra·chengna nanga aro badita nanggenchim aro uarangni damkoba sandichengna nanga.

CHAATRAM BIAPKO SEOKE RA·ANI

- Wabi·sarangna a·a ga·nanggipa aro chi joke katna man·gipa ong·na nanga.
- Wabi·sarangko ge·ram biapko man·a dipet ge·a a·palni sepango tarina nanga.
- Wa·bisarangona chi jokatna gita chimikrangko name nie donsona nanga. Bilsu gimikna chi chu·onge man·gipa ong·na nanggen.



Chaatram biapo
wa.bi.sarang

Wa·gi chara



- Wabi-sarangko chaatram biapko ge·a a·palni sepango tarina nanga, jedakode altue kamrangko ka·na man·gen.
- Wa-bisarangko chaatram biapko matburingrangni nosto ka·gnioniko champengna nanga.
- Agre sal ding·dugaode balwa ding·ani gimin sisropa. Apsan somoio, sal teng·anikoba man·a nanga, jedakode wabi-sarang cha·anirangko tarina gita man·gen; bilgripa wabi-sarang, sabisi man·a altua. Mikka bang·e wa·gipa biaprango wabi-sarangko mikka wadapaoniko champengna gita pindapanirang dongna nanga. Salakim ong·atna nanga. Am·pangchi ba chekchi wabi-sarangni changroani kri salakim dakna nanga.

JELATANI BIAPKO TARIANI

Chaatram biapni apala 1.2 meter aro ro·ani apalani kri 8-10 meter ong·na nanga. Rama retona gita 0.7-0.8 meter-mang riting ge·saoni ge·gipinona tarina nanga. Chaatram biapni a·ako hal game/subake chuatna nanga aro uarango a·mang, an·cheng aro a·salrangko bak 2:1:1 ong·e brine dona nanga. Uarango itarangchi ari dake dona nanga. A·ako chuatani mongsonggipa ong·a, (a) ari dake dona man·a (b) name chi joke katna man·a.

Ro·onrangko aro jabolrangko galna nanga jedakode, bithchil satani ja·mano apsan somoio chatokgen. Chaatram biaprango apsan gadango tarina nanga, jedakode bitchilrang ba wabi-sarang chi baksa balboe katangjawa aro chi skongjana gita name tarina nanga. Indake dakanichi ge·a a·pal gimikon chi gipe rudapna man·gen aro uandaken maming gipin chaanirang dongjawa.

A·kin aro soe dimitaoniko champengna gita bitchil satna/ge·na antisana skangan chaatram biapo jo·onrangni aro me·gimu chaatgijani samrangko sate dona nanga.

PLASTIKNI JOLARANGKO JAKKALANI

Ka·mao janapatenga gita dingtang dingtang da.la-chona plastikni jolarango rate ra·gimin wa·arangko ge·na man·gen :-

- Ga·tongko rate ra·gimina : 40 cmx 50cm, 0.1mm chatgipa ong·na nanga.
- Cheksirangko rate ra·giminrangna : 15cmx23cm, 0.1mm chatgipa ong·na nanga.
- Wabi-sarangna : 15cmx23cm, 0.06mm chatgipa ong·na nanga.

Sal rakaona ra·angna skang plastiko ge·giparangko antisanade salakimo (50-60%) donchengna nanga. Chaatram biapni gipeng 1.2 meter-rang ong·gipao dal·gipa plastikjorarangko riting sao ge 4 rang chakgen ba bijarem dalgipa plastikrangko ge 12-15 rang chakgen. Katomsa plastikrang gro ge·a a·palni kri ong·naba donga; iarangni dingtanggrikaniara 6-8 meter-rang ong·gen.



Palstil jolao wa.bisarang



Chaatram biapo ampanchi
nokking pine salakimata

Plastik ning·o ja·pangrang aro ja·dilrangni ge·sa ge·gipin baksa bajigrikgnioniko champengsona gita ja 3 prakon ge·jitna nanga. Ge·gipinrangoni jeba bibalna a·bachenggenchim ong·ode uako dintang dona nanga aro uako ge·a a·palo ge·na nangja.

Salanti chi runa, sam pike galna, salakim dakna, a·mang gapatna aro sabisi/jo·ongrangko champenganiko dakrongna nanga. Bitchilrangko/ge·ani bosturangko apsan ritingo ge·na nanga. Indake dakanichi samrangko pike galna gita altugen.

SABISI/JO·ONGRANGKO CHAMPENGANI

Chijima, guang bisring dakgipa, bijak sia aro bijak tokgiparangan wabi·sarango nikronggipa sabisi ong·a.

- Chijimani a·sel bitchilrang soa. Namgipa dakbewalrangko ra·gatanichi ge·ram biapko sabisirangoniko naljokatna man·a. Ge·ram biaprango agre pile chi rudapna aro salakim ong·atna nangja. Bitchilrangko dadimit chagijani samko satanichi sabisirangoniko champengsona man·a
- Agre pile chijimgipa biaprango guang bisring dakgipa, donga aro uarang sal 20-30 ong·gipa wabi·sarango nosto ka·a. *Bambusa bambos*, *Dendrocalamus strictus* aro *Dendrocalamus brandisii*-rang sabisi man·a altugipa ma·malrang ong·a. Ja·pango chi skongani a·selo ga·tongoni nosto ong·roroe wabi·sa panggimikan nosto ong·a. Saa man·gipani ga·tong aro bijakrang rongsia. Chaatram biapo agre pile salakim ong·ataniko komiatanichi aro wabi·sarango bing·e ge·gija aro chi on·aniko komiatanichi sabisirangko champengna man·gen. Samrangkoba satrongna nanga.
- Bang·bata wa·pangrangni bijakrangko maram cha·a. Saa napahaon bri gimin bijakrang tapgra ba a·mang rong daka. Sabisi bilongahaode bijakrang sisropa. Iako namatanide jo·ongrangni samko satanichi ong·a.
- Dintang dintang jo·ongrangni cha·anichi bijakrangko nisiata aro bijakrangko tokanirang wabi·sarango ong·rongbata. Jo·ong cha·aniara, wa·pangrangni ma·malrango pangchaka aro wabi·sarango ge·ani rokomo pangchaka. Jo·ongrangni samko tik ong·e satna nanga.

CHIMONGE DONANI ARO GE·NA SENGGIPA WA·ARANGKO BIAP GE·SAONI GE·GIPINONA RA·ANI

Ge·na sienggipa wa·arangko man·a dipet ta·rake ge·a a·palni (ge·na) a·kol cho·giparango dona nanga. Basakoba ge·na sienggipa wa·arangko maiabani a·selo ba ge·a a·palko taria matchotkujani gimin ba ge·ani somoi ong·kujani gimino dikdiksa somoina chimonge dona nangnaba donga. Indake ong·genchim ong·ode, wabi·sarango salakim, chijimgipa aro ka·singipa biaprango dona nanga. Biapni kri aro badita somoina chimonge dongen, uni kri salanti chi rudape on·a nanggen. Indake chi rudape on·anichi ja·dilrangko chaatna dakchaka.

BIAP GE·SAONI GE·GIPINONA RA·ANI

Ge·na sienggipa wa·arango chaatram biaponiko ba je biapon ge·ahachim ua biaponiko ge·a a·palona ra·angna nanga. Ian bang·e ge·anirango dakna gita mongsongbate ong·a, maina ge·jolaniko dakna gita chu·sokbreani ong·ja. Ja·pang nagitalna agre (jekon bang·gija ja·pangrangkosan aro ge·jolna nanga) gipin ge·na sienggipa wa·arangkode ge·ani niamrang donggenchim ong·oba ge·ram biapo ba nirok·simsakna man·gipa biapo baditaba jarangna a·palo ge·na skang dona nanga.

Bang·bate chaatram biapangan ge·na sienggipa wa·arango plastikrango on·ronga. Pilakchikon nigopgenchim ong·ode, ja·dilrango aro ja·ritingko duule donggipa a·mangrang olgroke aro brete ga·akjana gita ia plastikrango biap ge·gipinona ra·angna skang sal 1-2 na skang chi runa nangjaha. Indake dakaniko ding·gipa biaprango dakna nangja, ba ge·na sienggiparango chel·a biapona ra·angna nanggenchim ong·ode iako dakna nangjawa.

Ja·pang nagitalrango ra·angengmitingo ja·pango a·mangrango on·e bimikrang bnekjana gita name chaljachi karomrome srongrong dona nanga.

Pilakni gitan, chaatram biapko rongtale rakkianian mongsonggipa ong·a. Biapko rongtale rakkibo. Bijak ga·akgiparango aro jabolrango itroke galna nanga, maina iarango jo·ongrang donggen aro uandaken sabisirango ra·bagen. Chi skonge dongna on·a nangja. ■

ORTORANG

a

apical dominance - Kambesikm itingo cheksi ong'katningija dongani.

b

bud wa·mik bimik bakugijagipa me·a jean bibalrang, ga·tongrang ba bijakrang ong·gen; ian dintangmancha bijak dakgipao donga.

bulbous bita ia light bulb gita bo·roma ba ripoma gita daka.

broadcasting bitchilrangko a.ao sata.

bibal balani ditangmancha chokchim chokchim bijakrang daka, jedakode wa·arangko ong·kataina miksonge jak ra·paani ong·a.

C

caryopsis samsi bite jeon bitchilni kosakgipa bak bigilo nangchape donga; bitchil rongsangipa, ran·a, samsirangni biteni birong.

clone ma'san oni ong·katgipa sam·bol indiba bitchilonide ong'ja.

clump wa·grim wa·a bipanggimik, jeon bang·a ga·tongrang apsan charima.

culm wapang jolprak.

culm shoot me·a ga·tong dambe ga·tong.

cutting ratonggimin wa·a bipangni bak jekon a·mango done ge·na man·a ba ja·dil chachina gita chio dona man·a.

d

desiccant chisalopgipa bostu jekon ran'natna nangode jakala.

e

explants wa'ani je bakkoba tikote ra'a jeonin charako ongkatatna man.a.

f

farm yard manure (fym) matchu ki'i a·sal.

flowering ruuta bilsu rangni ja'mano ongrongija bibal bale bite nange wa'rama.

g

genotype ba'kapaoni ma'mal ongkatani.

genus mamalni dol.

ga·tong altue ma·sina man·gipa 'wa·a', ia ga·tong ja·pangoni chabae kosakchina srongstrong chadoa.

i

Inflorescence bibalni chokchim.

Internode bisku ge'gni gisepo gipa ga'tong/wa'tong.

m

monopodial bamboo agre sin'gija aro ding'gija agilsakni bakrango chagipa wa'a jean wa'chongma dake chaja.

morphology sam·bolni bimangko nie skie ra'ani.

me·a a·a ningo chagipa ja·pangming a·a kosako chone chadogipa ga·tong.

n

node bisku ba biritchu jeonin bijakrang ba bimikrang ong·kata.

O

offset wa·a bi·sa ja·pang dakgimin ga·tong jekon ge·na gita jakkala.

P

petal bija mepilip ba do'orangko ba'na salgipa bibalni bak.

prunning cheksirangko den·e gala jedakode gital nabagipa ga·tongrang cha·ani·ringanirangko man·gen aro unbaksana bing·stipe chagnioniko champengna gita ong·a.

R

rhizome wa·pang a·a ning·o chagipa ga·tong ba biritchu gnanggipa ga·tong jeon wa·ringkaprang ba bijakrang donga aro biskurangoni ja·dilrang chaa.

rhizome neck jatinggitok ja·ting ge·sako gegipin chatgipa ja·tingming nangrimatgipa.

root primordium wa·mik bimik bakugijagipa me·a jean bibalrang, ga·tongrang ba bijakrang ong·gen; ian dintangmancha bijak dakgipao donga.

S

scale leaf wa·ringkap ja·pangko rakatna gita chagipa bija dakgipa jean wa·ani dal·roroani gita gooke kata.

Secateur kenchi dakgipa silkep ratani ostro.

Species ma·malrang pilak janggi gnanggiparangko bak dake سوالani ong·a; ianosan dakgipa dolrangko man·gopa aro uarang nangrimgrike bi·sarangko ong·ata.

Stigma Bibalni bak jeon pulni ginchi dakgipa ma'bake bite aro bitchilrangko nangata.

Sympodial dinggipa biapo chagipa wa'a jean wa'chong dake jela.

W

Winnowing birongni cha·cheko choe gala.

NMBA ni minggipin chappa ka. gimmin ki. taprang

An Annotated Bibliography (CD), Bibliography, Rs 200, \$20

Dingtangdingtang ki taptanoniko wa. ani bidingo uiatani ba talatanirangko 3000na baten KFRI ni chiminge dongimin, mingpaknan kandike janapani gnang.

The Bamboo Book, Field Guide (FG 01 02/04), Rs 150, \$15

Wa.chong gnanggipa wa.ani gimin talatchengani. Wa.ani rokomrangko talate ba ma.siate on.ani. Rokomsa rokomgipinoniko dingtanggrikatna nengrae nikna ba nie uina mangipa chinrangko jakkalaha.

Bamboo flooring, Market Assessment (MA 01 02/04), Rs 250, \$25

Wa.aoniko tarigipa anchakani (Floor) niko asongtango jakkalna baditako nanggen aro uarangko badingchiwalani cholrangko sandie niani.

Bamboo Furniture Components, Market Assessment (MA 02 02/04), Rs250, \$25

Wa.aoniko tarigipa jakkalanirang (furniture) niko a.songtango jakkalna baditako nanggen aro uarangko badingchiwalani cholrangko sandie niani.

Building with Bamboo, Training Manual (TM 01 02/04), Rs200, \$20

Wa.achi nok rikaniko skie on.ani ki.tap. Iako TRADA, UK, DFIDni dakchaniko rae tariaha.

Bamboo Shoot Processing, Training Manual (TM 02 02/04), Rs100, \$10

Dam ba koros komigipa jakkalani bosturangchi me.ako tarie cha.ani ba jakkalaniko songadamrangni manderangna skie o.nani ki.tap.

Propagating Bamboo, Training Manual (TM 03 11/04), Rs 150, \$15

Wa.a bitchiloniko ba wa.a bipangni dingtangdingtang bakrangko jakkale ge.e jelroroatani cholrangko skie on.ani ki.tap.

Cultivating Bamboo, Training Manual (TM 04 11/04), Rs 200, \$20

Wa.ako namedake bagan bari dake ge.na bangen talatanirangko on.e tarigimin skie on.ani ki.tap.

Kosako me sokgipa kitaprangko crossed (a/c payee) bank draft ba chequerangko TIFAC'na watate brena mangan. Bank draft tariode Delhio jakkalnan man.gipa (payable at Delhi) ong.na nanggen. Delhini a paloni cheque ong.ode tangka gong 60 ko dapna nanggen.

- *Pack ka.ani aro tarie watatani korosrangkoba janapgimin damon manchapaha*
- *Gong 3000 batani ki.taprengko breode 10% ko komiatgen.*

Cheque / drafrangko NMBA na ka mani addressona watatbo:

National Mission on Bamboo Application(NMBA), TIFAC
Vishwakarma Bhavan, Shaheed Jeet Singh Marg
New Delhi 110016, India.