

BALHLA



Issued by
Department of Horticulture
MIZORAM : Aizawl

Balhla

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Botanical Name : *Musa paradisiaca* L.

Family : *Musaceae*

Common Name : *Banana*

Balhla hi Mizorama kan thei thar tam ber leh kum tuana kan hmuh theih a ni a, thlai pawimawh tak a ni. 2734 Ha. hmunah chingin 15,433 M.T. kan thar a (2001 statistic report), ram chhunga ei ralah kan la hmang vek hrih a, mi pakhatin 17kgs. (nitin 1 eiin ni 200 vel ei theuh) a nei ang kan ni a. Tuna kan thar let hi thar leh ila kan taksa mamawh tawk (minimum diet) kan nei thei chauh ang. Ram pawna hralh tur phei chuan tan lak a la ngai hle. Taksa tana a thatzia ngaihtuaha kan ei tam deuh deuh pawh a pawimawh hle a ni.

Sik leh sa leh leilung duh zawng : Balhla hi ram lum leh hnawng tamna atanga ramro lam (semi-arid) leh tuipui zawl atanga 2000 MT thlenga sangah a chin theih a. Variety a zirin ram lum, phai leh zoah chin theihte an ni. Mizorama kan chin tam ber hi Tall Cavendish a ni a, boruak lum leh hnawng tam lam, 600-900 MT-a sang, nipui leh thlasik inthlauhna nasa lutuk lo, temperature 20-30°C inkar leh lei tha d'ur tamna hmunah a tha deuh ber a ni. Vur tlakna hmunah leh ram lum lutuk 36-38°C velah leh lei khal

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ban hmun tui inthlithlawr that theih lohna hmunahte a tha thei lo. Lei-thûr lo leh al lo 6.5-7.5 pH hi duhthusam a ni bawk. Local variety kan neihho Balhla thûr (thûrtê) leh Banria-te hian phai leh khawlum an duh deuh a. Natna an tuar chak bawk a, chin chi tak an ni ve tho mai. Chawhmeh leh chips-ah te hman chi (Culinary)-ho hi kan la ching uar lem lo bawk a ni.

1. **BALHLA CHI THA THLAN DAN :**

- a) A peng thang chak, 80-120cm.-a sang, 1-2kg.-a rit.
- b) A bul vâwng tha, a ler lam zuih zak si, a hnah zum kawh vah.
- c) A bul bawk leh a zung pu tel ngei, chawrna tur mit pawh nei.
- d) Natna leh rannung bawm loh, huan tar lo leh enkawl fai that ami ni bawk se.

2. **PHUN DAN :**

- a) A khur 60 cm. biala laih lawk a, lei chunglang lei tha Balu leh FYM/Compost inzata pawlha hnawhkhah hnuah uluk taka phun a, tui pek nghal tum hram tur a ni.
- b) A kar hlat zawng chu variety-a zirin a dang thei a. Hmun awihah chuan leilung luang ral vennan leh terrace buatsaih nghal nan hman a tha a, contour lines-ah 1.8 - 2.5m a bi leh bi inkar leh 3m-a tlar inhlatin a tawk tlangpui.

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- c) Phun hunah chuan tui pek tur neih dan leh sik leh sa azirin a hrilh ber a. Tlang lo/huana kan phun danah chuan March - April hi hun tha ber a ni a. Tui pek tur neih chuan January - March thlaa phun hi a tha bera hriat a ni. Tin, fur zawh lam September - October-ah pawh a phun theih a, ruah sur tam loh kum emaw fur laia khua a that deuh reng lai pawn June - July-ah pawh a chin theih bawk. Mahse ruahsur thut thulah, a kung tan chhum lova phun tur a ni.

3. **LEITHA PEK** : Balhla hi tui leh chaw heh deuh mai anih avangin enkawl ngun loh chuan a thang chak lova, a peng pawh a chhuah harin a thar har a, a thar hlawk lo thin. Kung khat zelin chaw N.P.K. a mamawh dan chu Urea (217 - 434g.), SSP (220 - 550g.) leh MOP (334 - 1000g.) a ni a, dose hniha pein phuntirh leh thlaruk hnuah a inzatin pek tur a ni. Nitrogen leh Potassium a mamawh hnem avang hian Bawngêk leitha/compost leh vut te pek tam tur a ni.

4. **TUI PEK** : Balhla hian tui a mamawh hnem em em a, thal laia tui pek theih chuan a thar hlawk phah thei hle a ni. Drip system hi a tha ber a. Hnim leh a hnah ro tea a kung si phak loa khuh (mulching)-in tui a mamawhna nasa takin a puhrukin leitha a pe bawk.

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5. **A PÊNG PAIH :** Mizoten kan ui vang emaw, tul lo emaw, tha thlawn senga kan inngaih tlatnate avangin a pêngte kan paih then lo thin a, a hlawk tur angin kan thar hlawk loh phahin kan ti tar hma thin a ni. Kan duh ber chu a kung ni lovin a rah a nih avangin a rah thatna bera enkawl chu kan tih makmawh a ni tlat mai. A pêng paih hian a kum khat tharah awmzia a nei lem lova, a kum hnihna atang erawh chuan a dang hle. A pêng pakhat chauh zuahin 12,253 kg/ha, a pêng pahnih zuahin 8606 kg/ha, a pêng pathum zuahin 8879 kg/ha, a pêng paih miah lovin 6720.8 kg/ha a thar a ni. (Dr. S.P. Singh)
6. **A KUNG DO :** Thli len tluk avangin kan hloh tam thei hle. Balhla enkawl that loh, chaw pek that loh, a peng paih loh leh rannung bawm avang ten a tlu hma bik bawk. A rahna kung chu uluk taka do a ngai hrim hrim a, a kawkalh leh nghet tawka do tur a ni. Tin, vau hrulah mau emaw thing hmun thli dan (wind break) zuah/phun tur a ni.
7. **A BU TUAM (WRAPPING) :** Balhla bù a kung ami hi sarang var emaw, a hnah vêka tuam hi ni sa em hmel-hem (sun-burn) loh nan leh thli lum laka ven te, rannungin a tih hmel-hem laka ven nante a pawimawh a, a rah rawng pawh a mawi phah a ni.

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8. **RIH VUR** : A kung bul rih vur pawn hian tui tling tur a veng a, a zung a chhuah belh tirin a kung a ti nghet a, a ngeih bawk a ni.
9. **ENKAWL FAI** : Balhla hmun enkawl fai loh hi a tâm kan tih thlentu bulpui a ni. Hnimte chu a tul anga thlawhfai a, compost siam nan emaw mulching atan hman ni se. Balhla hnah ro te, a hnah hrisel lo leh tawihite, a tukna bul leh kungte pawh thenfai a, hman tângkai zel thin tur a ni. Tumbû khailengte pawh a rah a puitlin thawkhat veleh sah thlaka paih fel nghal zel a tha bawk.
10. **THLAI DANG CHIN PAWLH** : Balhla hi 'Shade-cum-nursing crop' an ti hial a. Mizoramah pawh kan huan bul tan dan hi vaha hâl phawt a ni tlangpui a. Hetianga bul tan chuan Balhla phun phawt mai chu kan tih makmawh a ni. Serthlum, Theihai, Coconut, Kuhva, Rubber, Butter fruit, etc. leh thlai dang Hmarcha, Sawhthing, Aieng, Bâl, Bawkbawn, Vaimim leh thlai dangte tana zar hlimtu, hlo ti awltu a ni.
11. **A THAR DAN** : Phun atanga thla 9-ah a vui tan tlangpui a. A vuih atanga thla 3-4-ah a tuk a hun thin. September - April hi a thar vanglai a ni a. Dwarf Variety ho chu 300 - 400 qtls./ha. a thar thei a, Tall variety-ho chu 152 - 800 qtls./ha. a thar. Mizoramah chuan 50 qtls./ha. thar ang chauh kan la ni.

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12. SENG HNUA SAWNGBAWL DAN :

Balhla hmin hi a hmuar natnate avangin a hnûn atang leh pem dang atangin a tawih duh a. A ven nan chuan Aieng/Sawhthing/Purun var leh Neem tui atanga siam (extract), 1000ppm (1 ml./lit. water)-ah चाहिन a tawih tur a ven bakah a dah that theih chhung (shelf life) ni 12-in a tisei thei bawk. Heng zingah hian Aieng a tha ber bawk (K.R. Joshi & D.G. Vala).

13. RANNUNG LEH NATNATE :

a) *Pseudostem borer (A kung ngêt)* : Hei hi balhla tichhetu rannung langsar leh pawimawh ber a ni a, rannung/tuaingawt ang deuh hi a ni a, a dum leh sen a awm. Balhla kung leh bulbal ker kuain a chhungah a inthlahpung a, a note (larva) leh a puitlingin nasa takin balhla taksa an eichhe thin. A kungte eichhiain a thi thuai thin a, a tluk sam phah bawk.

ENKAWL DAN :

- i) Balhla chinna tur khurah Furadon 100gm. leh Neem Cake 5kgs. khur khat zelah pawlh tur a ni.
- ii) Balhla tiak/peng hrisel leh a hmun upa lo a mi chauh phun tur a ni.
- iii) He rannung hi a hluar viau chuan Nuvacron emaw Dimecron/100ml. leh tui 250lt.

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chawhpawlha kah tur a ni.

- iv) Neem cake 5kg kung tina pek leh Neem leaf/ kernel/Neem oil-a kah.

b) *Flea beetle (Nodostum subcostatum)* : Hei hi kêlte laimawm ang deuh te reuh têt têt, balhla hnah zîk inzial chung leh Balhla hnah no leh Balhla rah nasa taka zig-zag anga seh thintu hi a ni.

ENKAWL DAN :

- i) Balhla hmun fai leh tha taka enkawl.
ii) Endosulfan 35EC (0.05%) ni 10 dana kah tur.

c) *Banana aphid (Pentalonia nigronervasa)* : He aphid hi Balhlaa virus natna chi hrang hrang thehdarhtu a nih bakah Balhla kung leh hnah aṅanga a tui hipin a ti than thu hle thin.

CONTROL : Nicotine Sulphate 1:800 ratio-a balhla kah tur. (1lit. - Nicotine Sulphate, 800lits. - tui.)

A NATNA LANGSAR ZUALTE

1. **BUNCHY TOP** : A zîk leh hnah chawr a bawrchhawr a, a rah a chhuah thei lo.

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ENKAWL DAN :

- (i) A lan chhuah veleh a bulah rawta paih bo nghal tur.
- (ii) A natna pudarhtu (Banana Aphid) ven nan Neem Oil/Neem leaf/Kenel extract emaw Endosulfan 5gm. leh tui 10lits. pawlh a, ni 10 danah vawi thum kah thin tur a ni.

2. **LEAF SPOT (C.O : Cercospora Musae) :**
Balhla kung upa lam hnahah a nasa bik. Balhla hnah sir leh laiah spot a awm thluah a, a chang chuan zau tak tak a thi ruah thin.
CONTROL: He natna hi Dithane M-45 hmanga tih rêm a tha ber.

3. **PANAMA WILT OF BANANA (C.O. : Furasium oxysporium f. cubesa) :** Balhla natna zinga hlauhawm berte zinga mi a ni. Balhla hnah a lo eng vak a, a hnah keng kawhtu a lo tliak hnûp a, ni reilo te hnuah a tam ber chu a lo ro uai thla suau thin. Hei vang hian Balhla kungpui a lo keh sung a, a lo rêm hial thei thin.

A enkawl dan :

- a) Balhla natna nei chû kih daiha paih bo mai ni se.
- b) Balhla tiak/khi hrisel chauh phun tur.

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- c) Chinai hman a tha hle.
- d) Balhla hmun thlahnih aṅanga thla ruk chhung tui chintirin a natna a um bo thei.
- e) Bavistin/Benlate-a kah tur.

4. **MOKO DISEASE OR BACTERIAL WILT OF BANANA (C.O : *Pseudomonas solanacearum*) :**

Balhla he natna veite chu a rah a kung chung a awm lai kha a uk vek a, a ro mai ṭhin, a zîk hnah no 3 kha a hring eng dâng vek ṭhin. Balhla kung tan chhum chuan hnâi ang deuh a chhuak pur thei.

VECTOR : He natna thehdarhtute chu khawivah, khawidang leh fruit flies-te an ni.

A enkawl dan :

- a) Balhla chi hrisel chauh phun.
- b) Crop rotation (thlai kum tina chin thlak) hman ni se. Heng - Vaimim, Fû leh buhte nen tih hian a veng thei.
- c) Insect vector thah nan insecticide-a kah.

