



## **Balhla**

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# BALHLA

Botanical Name : *Musa paradisiaca* L.

Balhla hi Serthlum tih lohah chuan Mizoram thei pawimawh ber a ni. Ram hectare 2734 velah chin niin 15,433 MT tharchhuah thin a ni. Balhla hi ruahtui chauh ringa chin anih avangin a tharhlawk lova, India ram tharchhuah chawhruala 32.5 t/ha anih laiin 20.0 t/ha chauh kan thar a ni. Balhla hi a tangkaina a tam avangin tlang mite nunphungah hian a bet tel tlat a. balhla hian Vitamin A, Magnesium, Sodium, Potassium leh Phosphorus te a pai hnem hle a, vitamin C leh B<sub>2</sub>, Calcium leh Iron thahnem tham tak apai bawk. Balhla hmin hi tam hnem atan ei mai theih a ni a, balhla hel, tumbu leh a hmuam te hi chawhmeh ah hman a ni bawk.

## **Sik leh Sa :**

Balhla hian ram lum leh hnawng a ngeih hle a, temperature 15<sup>0</sup> C- 35<sup>0</sup> C- ah hlawh tling takin a chin theih a, average temperature-ah chuan 23<sup>0</sup> C nise duhthusam a ni. Khawlum leh ro ah chuan a bu (a bu) a thang thei lo a, Ram vawt lutukah chuan vur ten ahmet chhe bawk thin. Ram vawt ah chuan a rah hun chhung arei a, abu alian theilo a, a peng (sucker) a tam theilo bawk. Temperature 10<sup>0</sup> C aia hnuaiah chuan a phun chi loh a ngaih a ni. Mean sea level atanga 2000m thlenga sangah leh ruahtui kum khat a 500-2000mm a tlaknaah an ching ber.

## **Leilung :**

Eng leiah pawh ruahtui a paih thatna-ah chuan a chin theih a, tui tling a ngai theilo hle. Leithawl lampang deuh lei dur tha tamna-ah a tha duh hle. Leithur lo hi a china

tan a thain hlawhtling mahsela leithur hmunah pawh chinai a sawisak chuan hlawhtling takin a chin theih a ni. Lei thur lam tehna 6.5-7.5 pH a ngeih tawk hle.

**A chi :**

Balhla kual hi a tui avang leh a hralhna a that avangin a lar ber a. Poovan leh lawng balhla te pawh hi an beiseiawm hle a. Poovan a thar hlawkin tui tlemna hmunah pawh a tha thei a. Lawng balhla hi thlipui na tak pawh a tuarzo thei a nih avangin a tha bawk.

Loneitu thenkhat chuan an lovah balhla hi hriatchian mangloh te an ching a. heng ho hi an thar hlawk lo hle a, mahse a tumbu hi chawhmeh atan an hmang tangkai thin ani.



Dwarf Cavendish  
(Lawng balhla)



Giant Cavendish  
(Balhla kual)





Grand naine

### **A tharchhuah chungchang :**

A tharchhuah dan hi mamawh awm remchan dante, a chi, ei duhzawng leh a hralhna a zir te a ni thei. Aizawl, Lunglei leh Serchhip Division ah te chuan hralh tura tam tham taka chin anih lain Serthlum huan, Hatkora huan, Kuhva huan ah te leh thil dangte nen pawh chin pawlh tho an ni. Loneitu thenkhat te chuan an in bulah anmahni ei tur in an ching bawk.

### **A chindarh dan :**

Balhla hi a tlangpuiin a peng atanga chin darh an ni. A peng a hnah zum bultha 1-1.5 kg a rit vel hi chin atan a tha ber ani. A bul pawh hi a pumpuiin a zung nen emaw then darh emaw pawh in phun thin a ni bawk. A peng hnah hlai nei ho chi hi chu phun loh tur ani. A chhan chu a thar hlawk lova, rannungin an ei chhe duh in a vuihar bawk. Balhla kan phun dawnin a hnuai a mi ang hi kan zawm tur a ni.

- Kan balhla peng/ bul phun tur chu natna lak a him a ni tur a ni.
- Kan balhla phun tur chu tha taka tihfai a, daihlimah darker 24 kan dah tuihul tur a ni.

- Balhla peng/ bul te chu Neem tui 0.4% (tui litre khatah 4ml chawhpawlh) ah darkar khat chiahin a hnuah darkar 24 daihlimah dah tuihul leh tur a ni.
- Balhla peng/ bul te chu phun tawh tur a ni.

Balhla hi tissue culture atanga tihdarh ani bawk a. Hetiang anga siam chhuah Grand Naine an tih chu Mizoramah enchhin mek ani. Tissue cultured balhla te hi feet khat a sang an lo nihin Secondary Nursery atangin field ah phunchhuah an ni.

### **A hmun thlan dan leh a phun dan :**

Kan balhla phunna hmun chu ni eng hmu tha, hmarchhawng, tuitlin theih lohna, lawilen awlsam leh awih lutuk lo a ni tur a ni. Hmun awih lai deuhah chuan half moon terrace siam a phun tur a ni. March-April chhungin khur 0.6 x 0.6 x 0.6m (feet hnih bial) a laiha, lei chunglang leh ranek leitha chawhpawlha hnawhkhah tur a ni. Kan leilung te hi a thur tlangpui avangin khurkhatah chinai 250g leitha nen chawhpawlha telh tur a ni.

### **A phun hun :**

Balhla hi kumtluanin khawro zual lai (Nov. - Feb.) tihlohah chuan phun theih a ni. Amaherawhchu a phun hun tha ber chu April – June thla chhung hi a ni. A chhan chu rial in a denchhiat avanga hlohna kan pumpelh thei a ni.

### **A phun dan:**

Triangular system leh square system hi balhla phun dan tlanpui chu ani a, triangular system a phun chuan square sytem aiin 15.5% lai in a leng hnem zawk a ni.

High Density Planting system an tih hi tunlaih chuan a lar tawh hle a, hetiang system-ah chuan a bit thei ang berin an ching a, mahse hung khat-ah peng ptamtak an zuah ngailo ani.

### **A phun bit zawng :**

Balhla phun in kar hlat zawng hi a chi a zirte, leilung leh sik leh sa a zirte in a danglam thei a. A tlangpuiin hetiang hian phun tur ani. Lawngbalhla ah chuan 2.0 x 2.0m, balhla kualah 2.5 x 2.5m, Poovan ah 3.0x3.0m a inkar hlata phun tur a ni. Hetianga kan phun chuan hectare khatah Lawngbalhla 2500, Balhlakual 1600 leh Poovan 1111 an awm thei ang.

**Leitha pek dan :**

Balhla hi leitha mamawh tam thlai a nih avangin leitha tam tawh a thanthat nan leh thar tam nan pek a ngai a ni. Leitha pek hmawh a phunna lei chu chinai a sawisak hmasak tur a ni. Balhla leitha mamawh zat chu a hnuai mi ang hian entir a ni.

<b>Ranek leitha/ Vermicompost</b>	<b>Nitrogen (Urea etc)</b>	<b>Phosphorus (SSP etc)</b>	<b>Potash (MOP etc)</b>
Ranek leitha 15 kg emaw Vermicompost 6 Kg balhla khur khatah phun hmawh pek tur.	400g kung khatah vawi 3 a hnuai mi ang hian pek tur-  *200g phun atanga thla 1 ah  *100g phun atanga thla 4 ah  *100g phun atanga thla 8 hnuah	625g kung khatah phun rualin pek tur	500g of MOP kung khatah vawi 2 a hnuai mi ang hian pek tur  *250g phun rualin  *250g phun atanga thla8 hnuah (a vui chhuah hnuah tihna a ni)

Nov.- Feb. Thlachhung khawro zuallai hian Potassium leh Nitrogen an tlachham tlangpui, amaherawhchu a chung a kan tarlan ang hian Nitrogen leh Potassium thendarha kan pek hian an tlachham a puhru mai dawn a ni.



### **A peng suat dan :**

A peng tullo paih hi thil pawimawh tak a ni. A pengte chu a hun takah paih zel a, a kung a vuih laiin peng pakhat aia tam an nei tur a ni lo. A peng kan paih te a lo chawr that leh loh nan khawnvartui peng sahchhum pakhatah 4ml leih a tawk.



### **Balhla hmun vawn hnawn dan :**

Balhla kungbul vawng hnawng tura khuh hi khawro zuallai hian a pwimawh hle a. Hei hian hnim to tur a veng bawk. Hemi atan hian Buhpawl leh Balhla hnahro te a hman theih a ni.

### **A kung tlu tur ven :**

Thli na tak Cyclone leh ruahtui vangtein a kung a tluin a chhiatphah thin a. Hetianga a kung tlu tur ven nan hian Mau in do kawkalh thin tur a ni.



### **Tumbu suat :**

Balhla tumbu chu a rah insiam tantirh veleh paih tur a ni. A thatna pahnih a awm, Balhla bu tan chawtha a tam phah a, tin tumbu chawhmeh atan kan hmang thei bawk.



### **Eichhetu Rannung leh a Natna :**

Balhla tichhetu tlanglawn ber chu a kung ker chhetu rannung, a bul ker chhetu rannung, a rah eichhetu rannung, vutbuak natna te hi niin, Mizorama balhla natna tam berte erawh chu hnahkhawr natna leh Sigatoka te hi an ni.

<b>Eichhetu Rannung</b>	<b>A Lan chhuah Dan</b>	<b>Enkawl Dan</b>
Pseudostem Weevil (A kung ker chhetu rannung)	A kungah kua awm thluahin a tlu thin	<ul style="list-style-type: none"> <li>• A tichhetu rannungte chu mana tih hlum tur.</li> <li>• A hmun tihfai that tur.</li> </ul>
Rhizome Weevil (A bul/ zung ker chhetu rannung)	A kung laimu lai chu a lo thi thin.	<ul style="list-style-type: none"> <li>• A bul zung Neem tui 0.4% a chiah tur.</li> <li>• A kung thi te chu a vaia lakchhuah a halral tur.</li> </ul>
Banana Beetle (A rah eichhetu rannung)	A hnah zikno lai leh a rah a lo duk rang thin.	<ul style="list-style-type: none"> <li>• A hmun enkawl fai tur.</li> <li>• Neem 0.4% in a bulah leih tur.</li> </ul>
Bunchy Top (Hnahkhawr)	Hnah thanthu leh hnahkhawr.	<ul style="list-style-type: none"> <li>• Balhla peng hrisel chauh phun tur.</li> <li>• Hetiang natna vei te chu paiha halral tur.</li> </ul>
Sigatoka Leaf Spot (Hnah hmawr dum natna)	A hnah hmawrah a thlurin a dum thluah thin.	<ul style="list-style-type: none"> <li>• A hnah natna vei te paiha halral tur.</li> <li>• A hmun tihfai that tur.</li> </ul>





**Pseudostem Weevil affected plant**



**Larva of weevil**



**Rhizome weevil affected plant**



**Affected rhizome**



**Rhizome weevil**



**Bunch infested with beetle**



**Yellow sigatoka**



**Black sigatoka**



**Banana bunchy top**



**Banana brown aphid**

### **A Seng leh dahthat dan :**

Balhla hi a vui atanga thla 5-6 velah a hmin tlangpui a. Balhla hmin tha kan duh chuan buara in ni 4-5 vel khuh tur a ni. Balhla huan uluk taka enkawl ah chuan hectare khatah 20-25 ton vel a thar theih a, a bu pakhat rih zawng pawh 12-15 kgs vel a ni. Balhla te hi 13-14°C ah chuan ni 10-15 chhung vel a vawnthat theih a ni.

### **Balhla thar tam tura hriattur pawimawh te :**

- A peng hrisel tha thlan.
- A peng phun tur Neem tui a chiah.
- A hnah ro paihfai leh a peng suat
- A kung bul lei vawn hnawng tura khuh
- A huna tumbu paih.
- A kung tluk lohna tura do that.
- A mamawh tawk leitha pek.

### **Cost of cultivation**

Cost of cultivation for one hectare of banana planted with a spacing of 2.5x2.5m  
(1666/ha)

1.	Cleaning of site -	@ 5000.00/ha	Rs. 5000.00
2.	Pit digging (1666)	@ Rs. 20/pit	Rs. 33000.00
3.	Manuring and liming	@ Rs 15/pit	Rs. 25000.00
4.	Planting material	@ Rs. 5/sucker	Rs. 10000.00

5.	Planting of sucker and basin making @ Rs 10/plant		Rs. 16660.00
6.	Fertilization	Rs. 10/plant	Rs. 16660.00
7.	Pesticides	Rs 3/plant	Rs 5000.00
8.	Intercultural operation	Rs 10/plant	Rs. 16660.00
9.	Harvesting and others	Rs 3/plant	Rs. 5000.00

**Total cost of cultivation -**

**Rs 132980.00**

**Earnings**

1.	Bunch	(1600)	@ 100/bunch	Rs 160000.00
2.	Suckers	(5000)	@ Rs 5/suckers	Rs 25000.00

**Total earning -**

**Rs. 185000.00**

**Net profit -**

**Rs 52020.00**