

## Introduction:

IPM tih chuan thlai venhim kawnga a tichhetu rannung,natna etc kawng hrang hrang hmanga enkawla thlai hlawk zawka thar chhuah hi a tum ber ani. Sawhthing hi kan ram commercial crops te zinga pawimawh ber pawl ania,amaherawh chu rannung leh natna(Tam) avang te in kan thar chhuah tur ang kan phak lo fo thin.A bik takin Rhizome rot(Tam hri) hi a kan hriat ber leh harsatna min siama loneitute ti buai tu ber ani.Tam kan tih hian natna avang chauh nilovin rannung avang te pawhin a awm thei tho ani .Sawhthing hi kan thlai chin zingah eichhetu leh natna ngah ber pawl ania,chuvangin fimkhur tak leh uluk taka enkawl a ngai bik hle.Tin, a hmun ngaia sawhthing chin hi a tam duh te anti thin.Engpawhnise,Kum hnih(2) experiment a hmun ngaiah hlawhtling taka neih anih hnuah hetiang hian sawhthing tam leh eichhetu rannungte kan veng thei ani.



Natna leh eichhetu rannung larzual te:

Sawhthing natna :

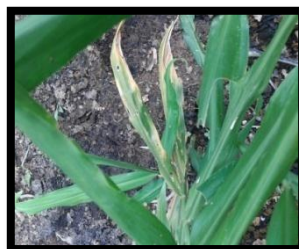
Rhizome rot (Tam hri)



Leafspot(Hnah de natna)



Bacterial wilt



Sawhthing eichhetu:

Rhizome shoot borer (A zik kertu)



Rhizome fly (A bul kertu)



Technology (Hmanrua hman te):

1. **A chi sawngbawl** : Ridomil + Mulching(Di/Buh pawl)
2. **Leilung sawngbawl**: Trichoderma harzianum/Viride@ 10g + 100g Cowdung or
3. Vermicompost / Plant.
4. **Kah(Spray)** : Systemic fungicides(Bavistin & Ridomil) and Systemic insecticides(Chlorpyrifos)

**A chi sawngbawl**: Sawhthing him tha natna laka fihlim chauh hman tur,A chi chu Ridomil 3g leh tui litre 1 pawlh hisap ah darkar chanve chiah hnuah hmun daih hlim ah darkar 24 vel dah hul hnuah sawhthing chu lin chauh tur ani.

**A leilung sawngbawl**: Sawhthing linna hmun tur chu terrace ni thei se, a theih chuan Raised bed (Lei rih pawn) siam a tha , tui tling a that loh avangin tui hawk luan kawrh siam bawh tur ani . A chi lin rual in kan lin na tur ah Trichoderma harzianum / Viride 10g leh 100g

Bawng ek tawih tha emaw / Vermicompost (Changpat leitha) chawhpawlh thum khat vel bul khatah dah zel a tha. Hei hian lei atanga natna kai thei lakah a veng.

**A kar hlat zawng (Spacing):** 20m x 45 m (A bi leh tlar)

**Earthing up (Rih vur):** A chi lin atanga ni 90 leh 150 vel ah hlo thlawh paha rih vur rualin urea/ DAP 5g (Thirfiante khat) vel bul khat ah phul a tha hle

**Mulching:** Sawhthing lin zawh veleh Di emaw Buhpawl emaw in 5 inches vela chhaha khuhtur ani.



**Natna laka ven dan:** Rhizome rot (Tam) hri hi a kai tawh chuan tih dam leh a harsat em avangin a chi leh leilung sawngbawl piah lama a kung/Bulbal tawih lo awm te chu kar chhuaha paih vat zel a tha ber. A hnah natna hi ruahtui rawn tlak chhoh hun lai than a pek chhoh hun lai velin a rawn lang tan tlangpuia silaia kahna ang deuh rannung zukna hnuhma ang hian a kaw suara, a nasatna ah phei chuan alang ro in a var suar thin. Hetiang natna alo lang veleh Bavistin leh Ridomil (2g leh tui 1 lt chawhpawlh) in ni 7 inkar dan ah wawi 3 vel tal kah tur a ni.

**Rannung eichhetu laka ven dan:** A bulbal kertu lung leh a zik /kung kertu pangang te hi a larzual an ni a, hetiang eichhiatna hnuhma hmuh veleh Chlorpyrifos (2ml leh tui 1 lt chawhpawlh) ni 14 inkar dan ah wawi 3 aia tlem lo kah

tur. A theih chuan Carbofuran theh thawt thawt (Broadcast) pawh a tha hle bawk

**Intercropping (Thlai chin pawlh):** Sawhthing hi leitha ei nasa thlai a nih avangin be lam chi (Eg Bekang) nena chin pawlh nise a tha.

**Crop rotation (Thlai chin kual):** A hmun ngaia sawhthing chin hi leilung sawngbawl that loh chuan natna inthlah punna remchang a nih avangin natna lei atanga kai chhawng (Soil borne) thei lo thlai nen in kar dana chin chhawk a tha Eg :- Buh, Zikhlum, Parbawr, Broccoli etc.

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## **NATNA LEH EICHHETU RANNUNG LAKA SAWHTHING VEN DAN (INTEGRATED PEST & DISEASE MANAGEMENT IN GINGER)**



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