

dawai EPN (Entomo pathogenic nematode) kumba 20 shamoit sha ha ka shi mon ka sboh 15 sngi shuwa ban pyndonkam ia ki ha ka jaka rep. Kine ki dawai ki lah ban pyniap ia ki khniang byrnai ba im hapoh ka sboh.

4. Pyllang ia ki nuit ki nier , ki sla tyrkhong ha ki jaka ba bun narud narud ka kper ha ka por mynsngi bad sa thang ia kine ki nuit ynda la sep ka sngi. Kumba la kdew haneng kine ki 'niang byrnai ki her sha ba don ka jingshai kumta ki wan her sha kane ka ding bad ki iap noh. Kane ka lad jingiada ynda leh man ka sngi kumba 7-10 sngi ka lah ban pynduna shibun ia ki kmie u 'niang byrnai.
5. Pynkhuid ia ka jaka rep bad wat ai lad ia ki phlang ki kynbat ba kin roi.
6. Tih ia u stong bad ia u jingthung ba la sah ha ka kper ynda la ioh ia u soh khnang ban pynduna ia une u jait khniang
7. Lada don ka lad pyndap um ia ka jaka rep ha ka por tlang. Kane kam ai lad ia ki khniang ban kha pylleng bad ha ka juh ka por ki khniang ba don hapoh khyndew ki iap lut noh.
8. Ia ki dieng ba don ha sawdong ka jaka rep lah ban synreit da ki bih khniang ha ka por ba ki mih pyrthei ki kmie/kpa u 'niang byrnai kata ha u bnai May-July ynda la sep ka sngi.
9. Pyndonkam da ki shrip lite lane ki

lantern (Light trap/Petromax /Lantern) ban pyllang ia ki 'niang byrnai ba her. Hynrei kane ka lad jingiada ka trei kam bha lada baroh ki nongrep jong ka shnong ki ia tylli ban leh kumjuh kata da kaba pyndonkam da ki shrip lite ha ka por 7:30-8:30 mynmiet man la ka sngi haduh 7-10 sngi lynter. Pdiang da ka dabur ba don um rynkat bad ka umphniang sharak shi shamoit sha



Ka Shrip Light

khniang ba kine ki khniang ynda ki lah hap ha kane ka dabur kin nym lah shuh ban her namar ba lah bit nah ki thap baniang.

10. Pynkhih ruh ia ki tnad dieng ba don sharud kper ha ka por mynmiet bad sa lum kumjuh.
11. Synreit da ka dawai biopesticide ba kyrteng Beauveria bassiana kumba 16 shamoit sha ha ka shi pump ha ki sla jong ki jingthung.

KRISHI VIGYAN KENDRA JAINTIA HILLS



Katto katne shaphang U ÑIANG BYRNAI

bad ki lad jingiada ba ia trei ryngkat lang bad ka Mariang lane
Eco-Friendly Pest Management of White Grub





Kmie Niang Byrnai

Khun Niang Byrnai

KA JINGLAMPHRANG

La khot ia ka kmie/ kpa (Adult beetle) jong u 'niangbyrnai ha ka ktien nongwei da u May beetle lane u June beetle lane da u Chafer beetle baroh kylleng satlak ka pyrthei bad ia une u jait khniang lah ban shem ha baroh ki jaka rep. Lah khot da kane ka kyrteng namar kine ki 'niangbyrnai ki mih pyrthei napoh ka khyndew bunsien ha u bnai Jymmang-Jylliew (May-June) ynda lah wan u slap lyuir(monsoon). Ia u khun jong u 'niang byrnai pat la khot da u White grub ha ka ktien nongwei. U long u wei na ki jait khniang khyndew ba pynjulong bha ia ka rep ka riang bad teng teng lei baroh ki jingthung ba lah mih hap ban thung biang namar ba la shah pynduh jait ha u ne u khniang. Ym don u wei ruh u jait jingthung u ba lah ban iada ialade (resistant) na u ne u khniang.

KA RUKOM PYNJULOR U NIANG BYRNAI

Kaporlap ka longka por ba kajingpynjulong ka jur bha. Une u khun niang byrnai u bam ia ki thied jong u jingthung bapher bapher hynrei ka kmie/u kpa (adult) pat ki bam ia ki sla jong ki wei pat ki jait jingthung ba don hajan tang ba tang ha ka por mynmiet. U niang byrnai u lah ban pynjulong 40-80% na ka 100. Lah ban shem ruh 2-14 tylli ki khun niang byrnai ba shong ha ki thied jong u jingthung haka juh ka por.

KI DAK KI SHIN HA U JINGTHUNG YNDA LA SHAH PYNJULOR HA U NIANG BYRNAI

U jingthung u tlot u swai bad suk ruh ban phut ia u tynrai. U khun 'niang byrnai u bam lut ia ki thied ba rit (fine rootlets) bad suki suki u jingthung u iap noh.

KI JAIT JINGTHUNG BA SHAH PYNJULOR HA U NIANG BYRNAI KI LONG KUMNE HA RUM

Riewhadem, Phan, Sohmynten, Shana badam, Presbin, Baingon, Sohkha, Bhendi, Pai, Sying, Shriew, ki phlang bad kumta ter. Une u 'niang byrnai u bun bha ha ki jaka ba pyndokam ia ka eit masi, eit sniang bad ka sbob eit langbrot.

LIFE CYCLE (KA JINGIM NADUH KA POR KHA HADUH KA POR IAP) U NIANG BYRNAI

Ka kmie u niang byrnai ka sdang ban mih pyrthei napoh khyndew naduh u bnai Lber (March) haduh u bnai Jylliew(June) hadien ba la ioh slap bha lada dei u slap shuwa lyuir (pre monsoon) lane u slap lyuir(monsoon). Ka kmie lane u kpa jong u 'niang byrnai ki mih lymbrum da ki spah tylli ha ka por 7:30 -8 baje mynmiet bad mar kumta ki her sha ki jaka ba ioh jingbam lane sha ki jingthung

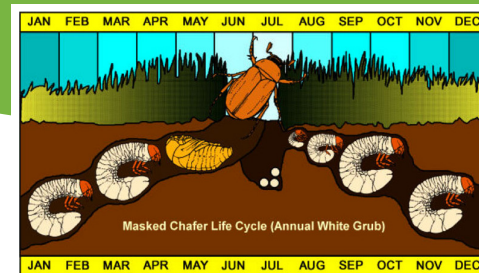
ba don hajan ban bam ia ki sla. Lada kum ha kane ka por ngi buh da ki shrip lite (Light trap) bun bha na ki, kin ngat ha kane ka shrip namar ki kmie/kpa u 'niang byrnai ki long ki ba iap bieja ka lite bad ki smat bha ban wan boi sha ki jaka ba don jingshai. Ha kajuha ka por ruh ia ki phlang ki kynbat ba don sha rud sha kiar lah ban synreit da ki bih khniang khnang ba ynda ki khniang ki wan bam ia ki sla kin iap shi syndon.

Ka kmie ka kha pylleng ha u bnai Jylliew-Naitung (June-July) ynda ka khyndew ka lah sngem um slap bha. Ki pylleng ki long rong lieh bad ki pyllong. Hadien 7-10 sngi kine ki pylleng ki kylla long khun 'niang byrnai (grub).

KATTO KATNE KI LAD JINGIADA BA IA TREI RYNGKAT LANG BAD KA MARIANG

Ngidei ban sngewthuh ba ka long kabe eh bha ban pynduh jait ia une u khniang lada pyndokam tang da kawei ka lad jingiada. Hap ban don bun ki lad jingiada (integrated management)

1. Puh ia ka jaka rep ha ka por lyuir ban pynmih ia u 'niang byrnai ba la sah tlang hapoh khyndew bad ruh ban ai lad ia ki sim ki syiar bad ia kiwei pat ki jait mrad ban bam ia ki. Ha ka juh ka por ruh ki kjat sngi ki lah ban thang ia shibun ki pylleng khniang ki ba shong hapoh ka khyndew.
2. Ber da ka shun muna lane shun powder (Agricultural lime) ha ki jaka rep kumba 200-400 kg ha 3 bnai shuwa ban thung jingthung kata ha ka por ba puh lane ba pynkhreh ia ka jaka ba mut rep. Pyndokam ia ka shun tang shisien ha man la ka Snem. Ka jingber ia ka shun ka lah ruh ban pyniap ia shibun ki khniang khyndew bapher bapher bad ruh ia ki pylleng khniang.
3. Ia ka sbob eit masi, eit sniang, sbob mariang bad kumta ter ter donkam ban khleh ryngkat lang bad ki dawai bio-pesticides (ki dawai ba don jingim) kum ka dawai Metarrhizium anisoplae bad ka



Kine ki khun 'niang byrnai ki bam ia ki thied jingthung naduh u bnai July-September bad ha u bnai Risaw (October) ki kylla long 'niang long. Ha shuwa ba kin long 'niang long ki shna ia ki skum khyndew(earthen cell) ba kin shong hapoh khyndew. Hadien 2-3 taiew ki 'niang long ki kylla sha ki kmie/kpa. Kine ki shong beit hapoh khyndew ha ka por tlang haduh ka por ba la sdang ban hap slap kata ha u bnai March-June.



Skum Khyndew jong u Niang Byrnai



Jinghikai ban khleh dawai biopesticide ha Sbob