KAGWIRITSIDWE NTCHITO KA DETAIN, MANKHWALA OPHERA MBOZI ZA MCHIMANGA (Fall Army Worm)

Department of Agricultural Research Services (DARS) | February 2026

Ministry of Agriculture, Irrigation and Water Development

MAU OYAMBA

Chimanga ndi chimodzi mwa mbeu zofunikira kwambiri ku Malawi ndipo chimadzalidwa m'madera ambiri a dziko lino. Komabe, ulimi wa chimanga wakhala ukukumana ndi mavuto osiyanasiyana, zomwe zapangitsa kuti zokolola zikhale zochepa komanso alimi asapeze phindu lokwanira.

Kuphatikiza pa mavuto omwe alipo kale monga matenda osiyanasiyana, kusintha kwa nyengo, ndi kuguga kwa nthaka, m'zaka za pakati pa 2016 ndi 2017 kunafika mbozi zotchedwa **Fall Armyworm** zomwe zimafanana ndi Ntchembere Zandonda. Mbozizi zakhala zikuononga kwambiri chimanga m'minda ya alimi m'madera osiyanasiyana.

Chodetsa nkhawa ndi chakuti mbozizi zimatha kuwononga gawo lonse la chimanga. Komanso, zimaswana mwachangu, zomwe zimapangitsa kuti zichuluke msanga. Kuonjezera apo, mbozizi zimavuta kuzigonjetsa kwake.

Chifukwa cha mavuto amenewa, alimi ambiri akhala akugwiritsa ntchito mankhwala osachokera ku chilengedwe **(synthetic pesticides)** pofuna kuthana ndi mbozizi. Komabe, mankhwalawa amabweretsa chiopsezo ku chilengedwe komanso pa umoyo wa anthu.

Pofuna kuthana ndi vutoli m'njira yotetezeka komanso yokhazikika, Nthambi ya Kafukufuku wa Zaulimi, mogwirizana ndi bungwe la ICIPE ndi TLC, yatulutsa mankhwala achilengedwe otchedwa Detain, omwe ndi amphamvu, komanso osapereka chiopsezo ku chilengedwe ndi moyo wa anthu

Fig 1, Mbozi Yofanana ndi Ntchembere Zandonda ikuwononga Chimanga

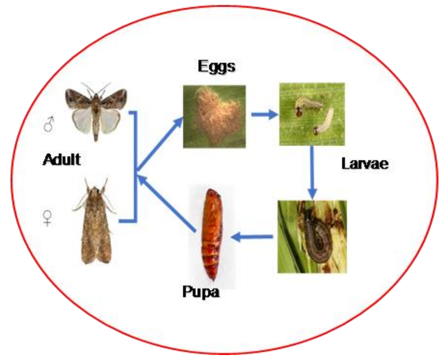

Fig 2, Umoyo wa mbozi yofanana ndi ntchembere zandonda

TSATANE-TSATANE WA MANKHWALA A Detain

- ✓ Detain alindi tizilombo tating'onoting'ono ta fangasi (fungus), *Metarhizium anisopliae* ICIPE 7, tomwe timakutidwa mmafuta ndipo timapha tizilombo tinzake.
- ✓ Ma fangasi amenewa amapha mbozi zofanana ndi ntchembere zandonda (Fall Armyworm) zimene zimawononga chimanga chikanali mmunda.
- ✓ Fangasiyu akagwira mbozi zofanana ndi ntchembere zandondazi, amadzichulukitsa mkati mwa mbozizo, ndipo pakutha sabata imodzi, mbozi zimafa.
- ✓ Fangasiyu amatuluka mkati mwa mbozi zimene zafa ndipo khungu la mbozizizo limasintha mtundu kukhala **gilini** (green).
- ✓ Detain (ICIPE 7), ndimlowa mmalo wabwino wa mankhwala ambiri. Iwowa sapereka chiopsezo ku moyo wa zinyama ndi anthu. Saonongaso zachilengedwe: sapha tizilombo tina tomwe timaphaso ntchembere zandonda komaso saononga minda.
- ✓ Mankhwalawa sazoloweredwa ndi mbozi chifukwa choti amapangidwa kuchokera ku tizilombo tamoyo.

Fig 3, Mankhwala a Detain komanso mbozi yafufa.

NTHAWI YOYENERA KUTHILA MANKHWALA A DETAIN

- ✓ Kuti mudziwe kuchuluka kwa tizilombo, lawililani mmawa kuona chiwelengerocho.
- ✓ Thirani mankhalawa polunjika masamba komanso nsonga ya mmera wanu nthawi yomwe mwaona mazira a mbozi pa masamba a mmerawu. Mankhwalawa amapha tizilomboti moyenerera akathiridwa tisanachulukane komanso tisanakule.
- ✓ Thilani mankhwalawa chakumadzulo kapena chakummawa. Iyi ndi nthawi yomwe tizilombotu timatuluka. Musathire mankhwalawa dzuwa likuwala popeza timakhala tabisala kuthawa kutentha.
- ✓ Tizilomboti timatha kuononga mmera posatengerra kakulidwe ka mmerawu.

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KATHILIDWE KA MANKHWALA A DETAIN

- ✓ Tsukani sprayer yanu moyenera musanayambe kugwiritsa ntchito
- ✓ Gwiritsani tchito madzi a pa chitsime kapena pa mjigo omwe alibe zinyatsi komanso mankhwala.
- ✓ Khutchumulani bwinobwino botolo la Detain musanayambe kuphatikiza kuti mankhwalawa asakanizane moyenera.
- ✓ Phatikizani 2 ml ya detain ndi 1 L yamadzi zomwe zikutanthauza motere:
  - *32 ml ya detain mu 16 L sprayer*
  - *40 ml ya detain mu 20 L sprayer.(400 ml ya detain pa hekitala imodzi)*
- ✓ Mankhwala osungunulidwa amakhala ndimphavu kwa ma ola ochepa, choncho onetsetsani kuti mwasungunula mulingo ogwirizana ndi ndime yomwe mupopere. Gwiritsani ntchito nthawi yomweyo.
- ✓ Onetsetsani kuti mukutakasa mankhwalawa pothira mmunda mwanu.
- ✓ Thirani Detain payekha, musasakanize kapena kuonjezera mankhwala a mtundu wina
- ✓ Kuthira kachiwiri kukhoza kuchitika pakatha masabata awiri, kenako thirani potengera ndimmene mundao wagwidwira ndi mbozi zofanana ndi ntchembere zandondazi.
- ✓ Detain akhoza kuthilidwa mpaka nthawi yokolola.

ZOYENERA KUTSATIRA PA KAGWIRITSIDWE NTCHITO KA MANKHWALA

- ✓ Valani zovala zodzitetezera nthawi yonse yomwe mukugwiritsa ntchito mankhwalawa.
- ✓ Sakanizani mankhwala okhawo omwe mutha kugwiritsa ntchito. Musasunge mankhwala osakaniza mopitirira maola anayi.
- ✓ Khalani tchelu ndi zolembedwa pa botolo lamankhwalawa, kasungunulidwe kake komaso tizilombo tomwe mankhwalawa amapha.

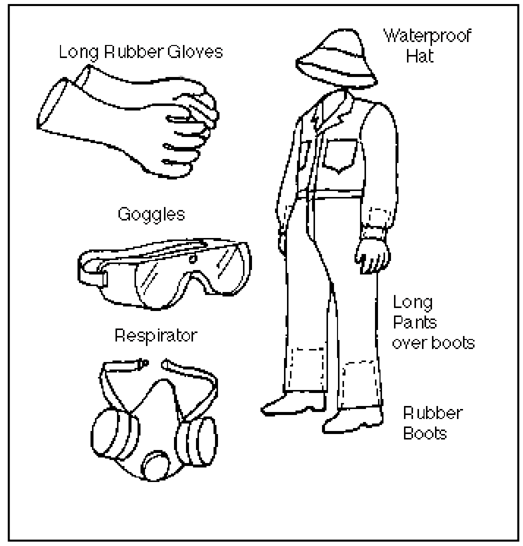

Fig 5, Zovala zozitetezera pothila mankhwala

Fig 6, Chimanga Chopopeledwa Mankhwala a Detain

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This Extension Circular was developed based on evidence presented at the Agricultural Technology Clearing Committee and thereafter approved by Ministry of Agriculture, Irrigation and Water Development in Malawi.

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