



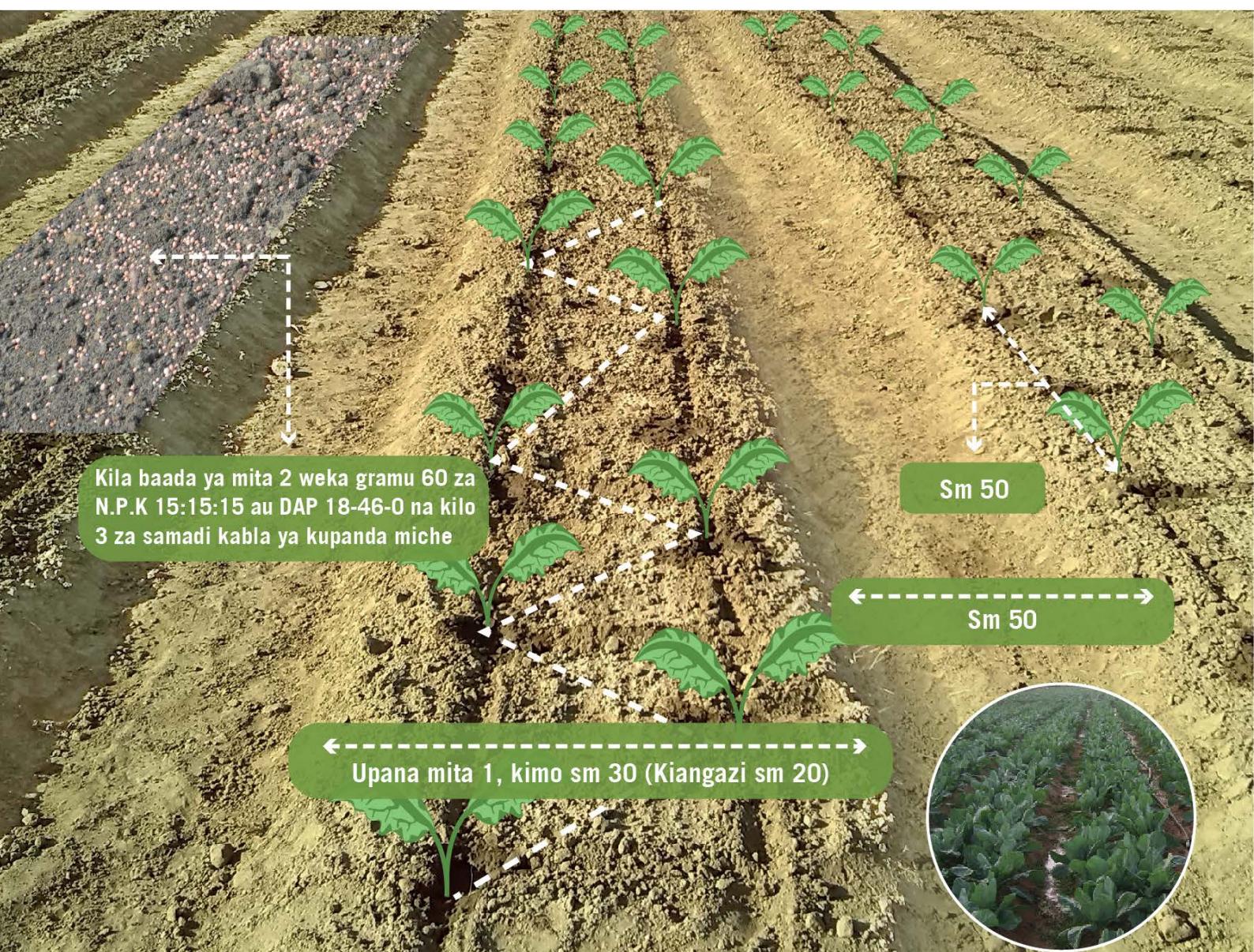
# Mwongozo wa mkulima **Koliflawa**

## • Maandalizi ya Shamba

- » Mifereji husaidia umwagiliaji na kutoa maji yaliyozidi shambani
- » Matandazo ya asili au ya plastiki yanaweza kuwekwa ili kutunza unyevu na kupunguza ukuaji wa magugu
- » Mimea 10700 kwa ekari (26,600 kwa hekta)-(idadi ya mimea inaweza kubadilishwa kulingana na aina ya mbegu na msimu)

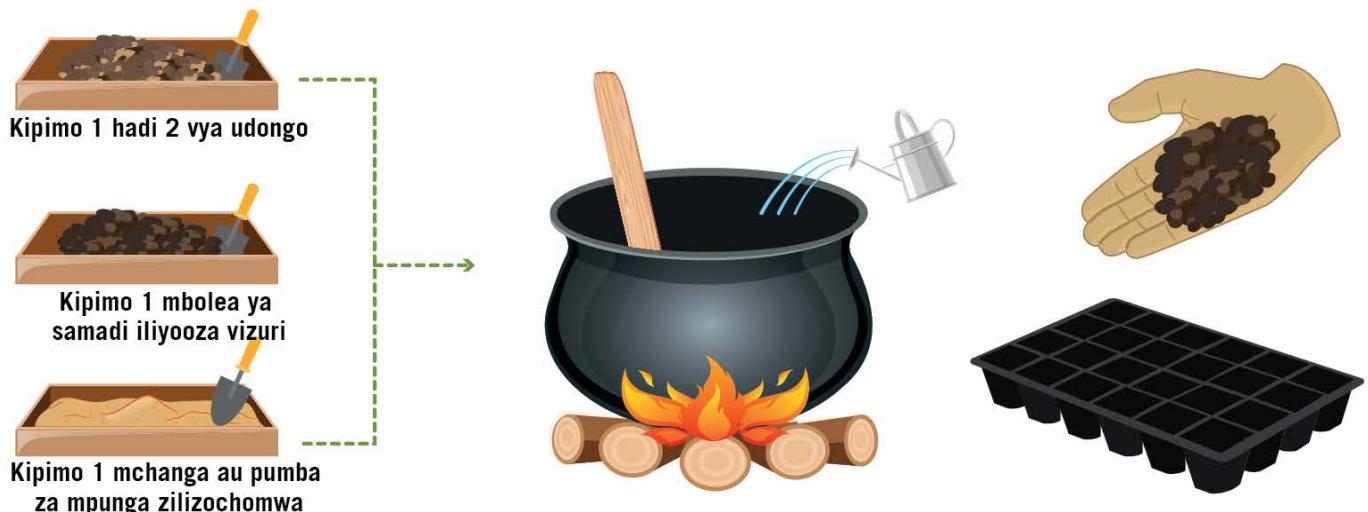


SWAHILI

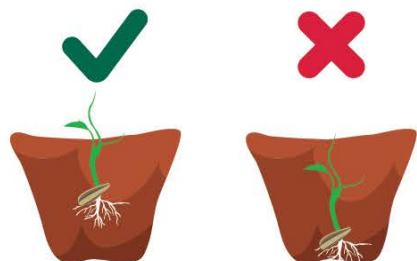


## • Uzalishaji wa miche

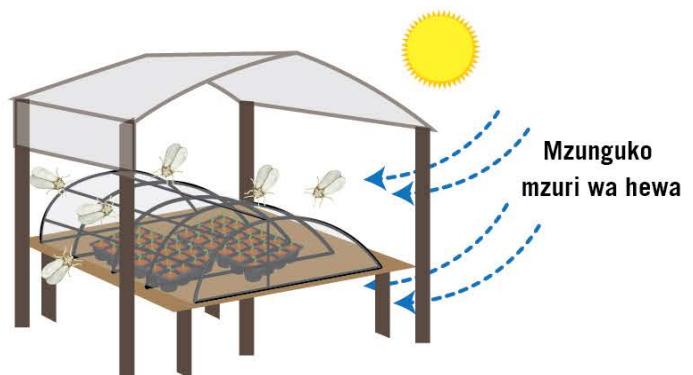
- ◆ Kuandaa udongo wa kuoteshea miche: Choma udongo kwa dakika 10 au anika udongo juani kwa nusu siku, kisha jaza kwenye trei/viriba



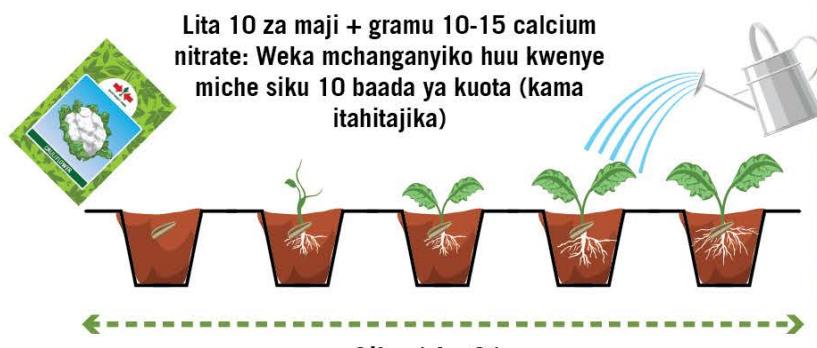
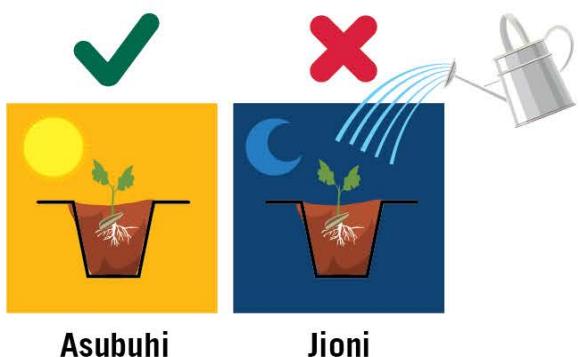
- ◆ Otesha/Sia mbegu na kulinda miche



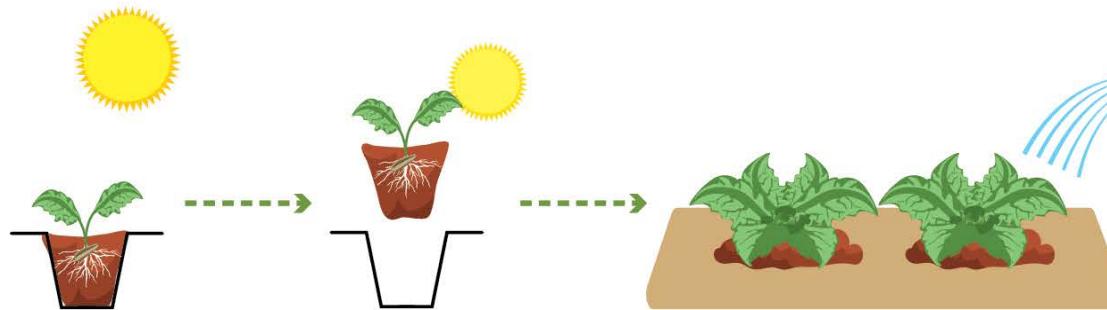
Kina cha kusia mbegu = ukubwa wa mbegu 2



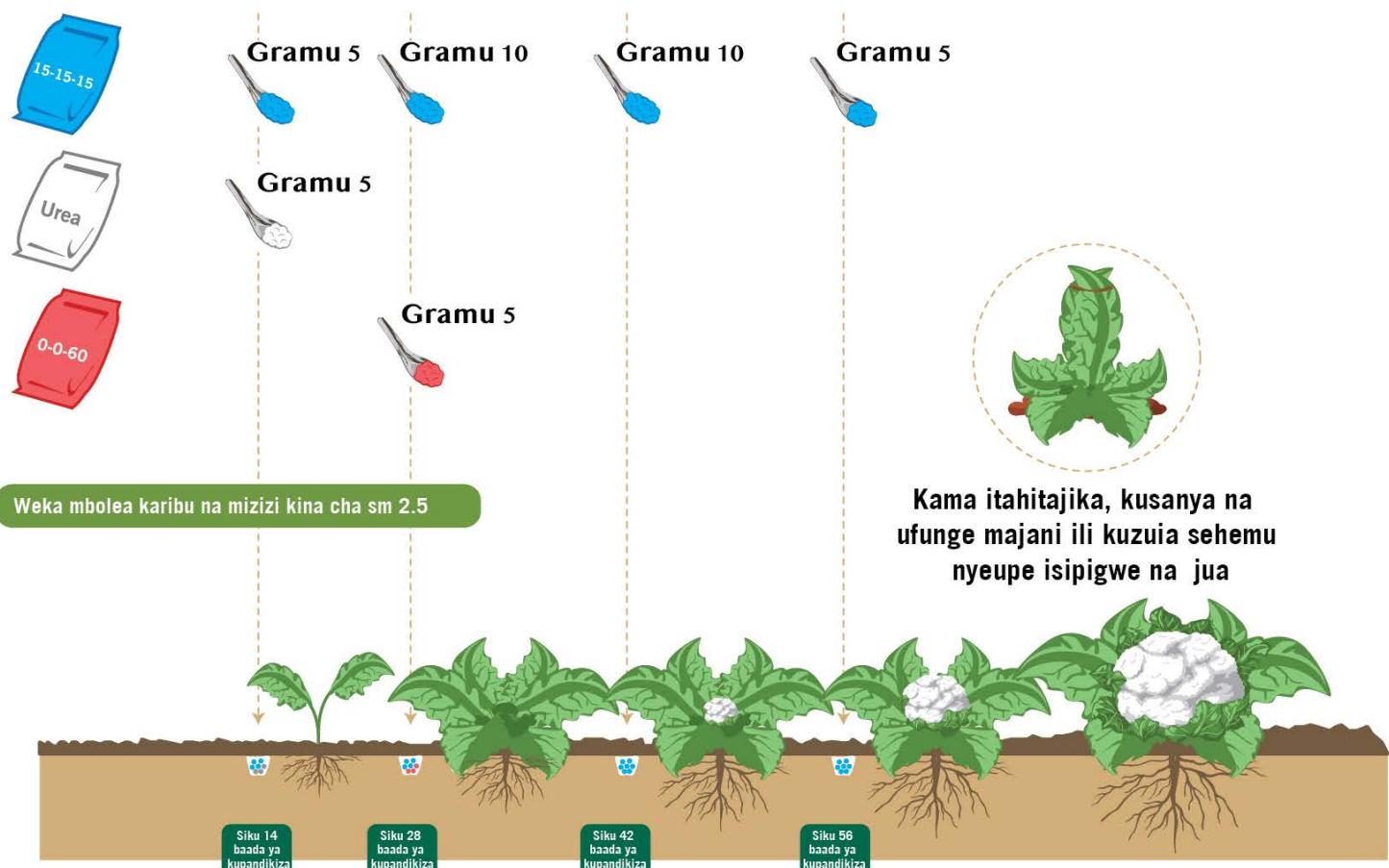
- ◆ Hakikisha unyevu unakuwa sawa muda wote



- ◆ Punguza kiwango cha maji na ongeza muda wa kukaa juani siku 5-7 kabla ya kuhamishia miche shambani wakati wa alasiri



## • Uwekaji wa mbolea



Kiwango kinachoshauriwa kulingana na uhitaji wa wastani wa virutubisho vya mmea na idadi ya miche 10700 kwa ekari  
Badili kiwango kulingana na msimu, hali ya rutuba ya udongo pamoja na hali ya ukuaji wa mmea

## • Njia jumuishi za udhibiti wa visumbufu zao/mimea na matumizi sahihi na salama ya viuatilifu



- » Tumia mitego ya gundi ili kufuatilia mwenendo na kukamata wadudu kwa wingi
- » Tumia mitego ya chambo kitamu au mtego wa mwanga kwa ajili ya nondo kipepeo



Kuzuia kuenea kwa magonjwa, mimea iliyoathirika, mazao yaliyozeeka na magugu lazima yaondolewe shambani na yaharibiwe.



Kubadili zao kila msimu kunapunguza uzalianaji wa wadudu sumbuu na magonjwa shambani na kurudisha rutuba ya udongo

• Njia jumuishi za udhibiti wa visumbufu zao/mimea na matumizi sahihi na salama ya viuatilifu

» Badili makundi ya dawa (MoA) ili kuzuia kutengeneza usugu

» Mara zote soma kibandiko cha maelezo ya kiuatilifu na matumizi yaliyokusudiwa ( zao na kisumbufu vilivyosajiliwa kwavyo)

|                                      |   |   |  |   |
|--------------------------------------|---|---|--|---|
| <b>Aina za wadudu sumbufu wa zao</b> |  |  |  |  |
|                                      | <b>Nzi weupe</b>  | <b>Vidukari</b>   | <b>Kiwavi</b>  | <b>Nondo wa kabichi (DBM)</b>   |

| Kiambato amilifu (AI)     | MoA ( jinsi inavyofanya kazi) | Utendaji kazi           | Nzi weupe | Vidukari | Kiwavi | Nondo wa kabichi (DBM) |
|---------------------------|-------------------------------|-------------------------|-----------|----------|--------|------------------------|
| Lambda-cyhalothrin        | 3A                            | TM                      | ✓         | ✓        | ✓      | ✓                      |
| Dinotefuran               | 4A                            | T                       | ✓         | ✓        |        |                        |
| Spinosad                  | 5                             | T                       |           |          | ✓      | ✓                      |
| Spinetoram                | 5                             | TM                      |           |          | ✓      | ✓                      |
| Abamectin                 | 6                             | TM (kwa kiasi kidogo T) |           |          | ✓      | ✓                      |
| Thiocyclam oxalate        | 14                            | TM                      | ✓         | ✓        |        |                        |
| Chlorantraniliprole       | 28                            | T                       |           |          | ✓      | ✓                      |
| Flubendiamide             | 28                            | T                       |           |          | ✓      | ✓                      |
| Bacillus thuringiensis    | 11A                           | M                       |           |          | ✓      | ✓                      |
| Azadirachtin (Mwarobaini) | UN                            | Haijulikani             | ✓         | ✓        | ✓      | ✓                      |

Jinsi inavyofanya kazi (MoA) kulingana na mwongozo wa kamati ya kushughulika na usugu wa viuatilifu dudu (IRAC); TM= Tumbo (T)+Mguso (M); Inayoingia kwenye mfumo wa ndani wa mmea

|                         |  |  |   |  |
|-------------------------|--|--|---|--|
| <b>Aina za magonjwa</b> |  |  |  |  |
|                         | <b>Uozo mweusi (BR)</b>  | <b>Uozo bakteria (BSR)</b>   | <b>Madoa jani altenaria (ALS)</b>   | <b>Ubwiri vinyoya</b>  |

| Kiambato amilifu (AI)                     | MoA ( jinsi inavyofanya kazi) | Utendaji kazi | Maelezo   | Uozo mweusi (BR) | Uozo bakteria (BSR)  | Madoa jani altenaria (ALS) | Ubwiri vinyoya |
|---|-------------------------------|---------------|---|------------------|--|----------------------------|----------------|
| Dawa za fangasi zenyne copper ndani yake. | M 01                          | P             | Kwa magonjwa ya bakteria : Tumia tu pale inapolazimu; usizidisha matumizi kuepuka usugu | ✓                | ✓  | ✓                          | ✓              |
| Chlorothalonil                            | M 05                          | P             |   |                  | Hauna dawa ya kutibu yenyne ufanisi  | ✓                          | ✓              |
| Mancozeb                                  | M 03                          | P             |   |                  | Dhibiti kwa kutumia njia za kukinga kama kuinua matuta, kubadili zao kila msimu na usafi wa shamba | ✓                          | ✓              |
| Azoxystrobin                              | 11                            | P + C         | Isizidi mara nne kwa msimu  |                  | Epuka kunyunyizia maji kwenye majani   | ✓                          | ✓              |
| Propamocarb                               | 28                            | P + C         |   |                  |  |                            | ✓              |
| Cymoxanil                                 | 27                            | C             | Bomba lenye mchanganyiko wa dawa za kukinga ( chlorothalonil au mancozeb)               |                  |  |                            | ✓              |
| Metalaxyl                                 | 4                             | P + C         | Uwezekano mkubwa wa kutengeneza usugu (tumia mara 2 tu kwa msimu)                       |                  |  |                            | ✓              |
| Bacillus subtilis                         | BM02                          | P             |   | ✓                | ✓  |                            | ✓              |

Jinsi inavyofanya kazi (MoA) kulingana na mwongozo wa kamati ya kushughulika na usugu wa viuatilifu dudu FRAC; P = kuzuia (Inafanya kazi kwa ufanisi ikutumika kabla dalili za ugonjwa hazijaonekana), C = Tib



**Vaa mavazi ya kujikinga**



**Hali ya hewa nzuri**



**Nozeli nzuri**



**Osha vifaa kisha oga baada ya kunyunyiza viuatilifu**