



## Use of trap and border crops in vegetable production



Trap crops are planted along with the main cash crops to protect it from a specific pest or several pests by attracting them for feeding, breeding and survival. These crops are generally planted as intercropping with the main crop, or as a border or in strip.

### Why trap crop?

- **Use of insecticides results in**
  - Insecticide resistance
  - Non-target effects (environment, natural enemies)
- **Need to look at alternative pest management tactics**
- **Trap cropping is one of those valuable pest management techniques.**

### Advantages of Trap crop

- **Reduce pest incidence to manageable level**
- **Reduce overuse of insecticide/dependence on insecticide**
- **Conserve or attract natural enemies to trap crop**
- **May pay for itself if crop is harvested**
- **Can be integrated with other IPM technologies: pheromone trap, sticky trap etc**



## Disadvantage of trap crop

- Growers need knowledge of insect behavior, migration, seasonal abundance etc.
- Insecticide may still be needed.
- Result may be inconsistency depending on weather.
- Timely management of insects in trap crop is required.



Mustard as Trap crop with Cabbage

## Successful examples of trap crop in vegetable crop

Main crop	Trap crop	Method of planting	Pest(s) controlled
Cabbage	Indian Mustard	Row intercropping	Diamondback Moth
Tomato	African Marigold	Row intercropping	Tomato Fruit Borer
Cauliflower	Indian Mustard	Row intercropping	Diamondback Moth

## Border plants

Border plants are management tools based on secondary plants used within or bordering a primary crop to restrict the movement of insect pests. Sowing of border crop like maize, arhar, sorghum, etc is done one month before main crop. During this period the border will attain a certain height which will attack as a boundary wall and restricts the entry of vectors to the main crop. Sowing should be done very close and dense with minimum spacing. Single border crop (like maize, arhar, sorghum) or double border crop (like maize and arhar) can also be done depending upon the need.



Maize as border crop with Cauliflower

## Advantage of Border Crop

- Lessens the use of pesticide
- Lower the pesticide cost
- Improves the crop's quality
- Helps conserve the soil and environment

