



Pest Situation of General crops, Vegetables & Orchards of Punjab (01 - 15 SEPTEMBER, 2017)

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PEST SITUATION OF GENERAL CROPS, VEGETABLES & ORCHARDS FOR 1ST FORTNIGHT OF SEPTEMBER, 2017

PEST SITUATION OF GENERAL CROPS

Maize

Stem Borer: The infestation above ETL has been observed in District Vehari and Sahiwal & below ETL has been observed in District Multan, Khanewal, Vehari, Lodhran, Bahawalpur, Bahawalnagar, R.Y.Khan, Sheikhupura, Sahiwal, Faisalabad, Attock, Jhang, T.T.Singh and Nankana.

Shoot Fly: The infestation below ETL has been observed in District Khanewal, Pakpattan Kasur, Attock and Muzaffargarh.

Whitefly: The infestation below has been observed in District Vehari.

Armyworm: The infestation has been observed in District Bahawalpur.

Sorghum

Stem Borer The infestation below ETL has been observed in District R.Y.Khan, Nankana, Faisalabad Multan, Lodhran, Sahiwal, Bahawalnagar, Rajanpur and Sargodha.

Pryilla: The infestation below ETL has been observed in District R.Y.Khan, Nankana, Bhakkar, Faisalabad and M.B. Din & above ETL in district Faisalabad and M.B. Din.

Shoot Fly: The infestation below ETL has been observed in District Khanewal and Muzaffargarh

Whitefly: The infestation below ETL has been observed in District Vehari and Sheikhupura.

American Bollworm: The infestation has been observed Below ETL in District Sialkot.

Toka: The infestation has been observed Below ETL in District Ferozwala, Nankana and Hafizabad.

Sugarcane

Stem Borer: The infestation has been observed below ETL in District Sheikhupura.

Toka: The infestation has been observed below ETL in District Hafizabad.

Whitefly: The infestation has been observed below ETL in District Gujrat & above ETL in district Narowal and Hafizabad.

Moong Bean

Army worm: The infestation has been observed above ETL in District Mianwali and Layyah.

Downy Mildew: The incidence has been observed in District Jhelum.

Whitefly: The infestation below has been observed in District Layyah, Bahawalpur and R.Y.Khan.

Jassid: The infestation below has been observed in District Layyah and Faisalabad.

Armyworm: The infestation has been observed in District R.Y.Khan.

Jantar

Armyworm: The infestation has been observed in District Bahawalnagar.

Rice

Borer: The infestation above ETL has been observed in District Lodhran & below has been observed in District Multan, Vehari and Lodhran.

Rice Hopper: The infestation Below ETL has been observed in District Bahawalpur.

Leaf Roller: The infestation below has been observed in District Multan.

Leaf Folder The infestation below has been observed in District Vehari, Lodhran, Bahawalpur and R.Y.Khan

Sesame

Jassid: The infestation below has been observed in District Muzaffargarh.

Ground Nut

Toka: The infestation has been observed below ETL in District Chakwal, Rawalpindi and Attock.

Tikka Disease: The incidence has been observed in District Khushab, Jhelum, Chakwal and Rawalpindi.

Leaf Spot: The incidence has been observed in District Attock.

Cluster Bean

Jassid: The infestation has been observed below ETL in District Khushab.

Collar Rot: The incidence has been observed in District Bhakkar.

Millet

Borer: The infestation has been observed below ETL in District T.T.Singh.

Toka: The infestation has been observed below ETL in District Khushab.

Whitefly: The infestation below has been observed in District Layyah.

Armyworm: The infestation has been observed in District Layyah.

Mash Bean

Aphid: The infestation has been observed above ETL in District Jhelum.

PEST SITUATION OF VEGETABLES

Arvi

Whitefly: The infestation below ETL has been observed in District Muzaffargarh.

Bitter Gourd

Whitefly: The infestation below ETL has been observed in District Khanewal, Lodhran, Sahiwal, Pakpattan and Chakwal.

Fruit fly: The infestation below ETL has been observed in District Lodhran, Pakpattan and Kasur.

Jassid: The infestation below ETL has been observed in District Sahiwal.

Sponge Gourd

Whitefly: The infestation below ETL has been observed in District Sahiwal, Muzaffargarh and Faisalabad.

Jassid: The infestation below ETL has been observed in District Sahiwal.

Downy Mildew: The incidence has been observed in District Muzaffargarh.

Leaf Miner: The infestation below ETL has been observed in District Ferozwala, Attock and above ETL has been observed in district Attock.

Red Pumpkin Beetle: The infestation above and below ETL has been observed in District Jhelum.

Round Gourd

Red Pumpkin Beetle: The infestation below ETL has been observed in District Jhelum.

Downy Mildew: The incidence has been observed in District Chiniot.

Sweet Potato

Whitefly: The infestation below ETL has been observed in District Bahawalnagar

Armyworm: The infestation has been observed in District Bahawalnagar and Nankana.

Shoot Fly: The infestation has been observed below ETL in District T.T. Singh.

Brinjal

Whitefly: The infestation below ETL has been observed in District Multan, Khanewal, Vehari,

Lodhran, Pakpattan, Bahawalpur, Bahawalnagar, R.Y.Khan, Muzaffargarh, Ferozwala and Nankana.

Jassid: The infestation below ETL has been observed in District Multan, Lodhran, Pakpattan, Bahawalpur, Muzaffargarh, Layyah and Nankana.

Armyworm: The infestation has been observed in District Sahiwal.

Fruit Borer: The infestation below ETL has been observed in District Kasur, Nankana, Multan, Khanewal, Lodhran, Pakpattan, Okara, Bahawalnagar, R.Y.Khan, Muzaffargarh, Rajanpur and Layyah and Faisalabad & above ETL has been observed in district Chakwal, Rawalpindi.

Stem Borer: The infestation below ETL has been observed in District Bhakkar.

Cauliflower

Whitefly: The infestation below ETL has been observed in District Vehari, Lodhran, Sahiwal, Bahawalpur, Bahawalnagar and R.Y.Khan

Armyworm: The infestation has been observed in District Multan, R.Y.Khan, Kasur and Rawalpindi.

Cabbage Butterfly: The infestation below ETL has been observed in District Sheikhpura and Khushab.

Cabbage

Whitefly: The infestation below ETL has been observed in District Khanewal.

Chillies

Whitefly: The infestation below ETL has been observed in District Multan, Lodhran, Pakpattan, Bahawalnagar, Rajanpur and Rawalpindi.

Armyworm: The infestation has been observed in District Sahiwal.

Wilt: The incidence has been observed in District Lodhran, Pakpattan and Bahawalnagar.

Collar Rot The incidence has been observed in District Multan and Lodhran.

Leaf Curl Virus: The incidence has been observed in District Rawalpindi, Lodhran, Pakpattan and Bahawalnagar.

Jassid: The incidence has been observed in District Khushab.

Pumpkin

Whitefly: The infestation below ETL has been observed in District Khanewal, Bahawalpur, R.Y.Khan, Muzaffargarh, Rajanpur and Sheikhpura.

Red Pumpkin Beetle: The infestation below ETL has been observed in District Bahawalnagar, Muzaffargarh, Kasur, Nankana, Faisalabad, Sialkot, and Rawalpindi.

Downy Mildew: The incidence has been observed in District Sahiwal, R.Y.Khan, Muzaffargarh, Ferozwala and Nankana.

Fruit fly: The infestation below ETL has been observed in District R.Y.Khan

Blight: The incidence has been observed in District Bahawalnagar.

Jassid The infestation below ETL has been observed in District R.Y.Khan.

Blister Beetle: The infestation has been observed below ETL in District Rawalpindi.

Mites: The infestation has been observed above ETL in District Jhelum.

Powdery Mildew: The incidence has been observed in District Jhelum.

Anthracoise: The incidence has been observed in District Kasur.

Spinach

Armyworm: The infestation has been observed in District R.Y.Khan and Muzaffargarh.

Whitefly: The infestation below ETL has been observed in District Khanewal, Vehari, Bahawalpur, R.Y.Khan and Muzaffargarh.

Jassid The infestation below ETL has been observed in District R.Y.Khan.

Leaf Spot: The incidence has been observed in District Khushab, Attock.

Tori

Whitefly: The infestation below ETL has been observed in District Multan, Khanewal, Pakpattan and D.G. Khan.

Jassid: The infestation below ETL has been observed in District Pakpattan and D.G. Khan

Tomato

Whitefly: The infestation below ETL has been observed in District Rajanpur.

Thrips: The infestation above ETL has been observed in District Khushab.

American Bollworm: The infestation above ETL has been observed in District Mianwali.

Okra

Whitefly: The infestation has been observed above ETL in District Nankana & infestation below ETL has been observed in District Khanewal, Bahawalnagar, R.Y.Khan, D.G. Khan, Muzaffargarh, Sargodha, Chakwal and T.T. Singh

Jassid: The infestation has been observed above ETL in District Sheikhpura, Nankana, Sargodha and Rawalpindi & infestation below ETL has been observed in District Khanewal, Bahawalnagar, R.Y.Khan, D.G. Khan, Muzaffargarh, Rajanpur, Kasur, Faisalabad, Jhang and T.T. Singh.

Spotted Bollworm: The infestation above ETL has been observed in District Nankana & infestation below ETL has been observed in District Rajanpur.

Mealy Bug: The infestation has been observed in District Bahawalpur.

American Bollworm: The infestation has been observed below ETL in District Jhelum and Chakwal.

Borer: The infestation below ETL has been observed in District T.T. Singh.

Vegetable Marrow

Whitefly: The infestation below ETL has been observed in District R.Y.Khan.

Downy Mildew: The incidence has been observed in District R.Y.Khan.

Turmeric

Leaf Blotch: The incidence has been observed in District Kasur.

Bottle Gourd

Downy Mildew: The incidence has been observed in District Chiniot.

Ridge Gourd

Leaf miner: The infestation below ETL has been observed in District Sheikhpura.

Long Gourd

Blister Beetle: The infestation has been observed below ETL in District Rawalpindi.

Downy Mildew: The incidence has been observed in District Rawalpindi

Cucumber

Downy Mildew: The incidence has been observed in District Chakwal.

Coriander

Root rot: The incidence has been observed in District Chakwal.

Fras Bean

Leaf Miner: The infestation below ETL has been observed in District Sheikhpura.

PEST SITUATION OF ORCHARDS**Citrus**

Leaf Miner: The infestation above ETL has been observed in District Nankana & infestation below ETL has been observed in District Multan, Khanewal, Vehari, Lodhran, Sahiwal, Pakpattan, Bahawalpur, Bahawalnagar, R.Y.Khan, Layyah, Kasur, Khushab, Mianwali, Sargodha, Chakwal, Rawalpindi and Bhakkar.

Citrus Scab: The incidence has been observed in District Bahawalpur and Sargodha.

Whitefly: The infestation below ETL has been observed in District Vehari and Sargodha.

Citrus Psylla: The infestation below ETL has been observed in District Khanewal, Vehari, Lodhran, Pakpattan, Bahawalpur, R.Y.Khan, Sargodha, Rawalpindi, Mianwali and Bhakkar.

Slow Decline: The incidence has been observed in District Multan, Lodhran, Bahawalpur, Bahawalnagar and R.Y.Khan.

Gummosis: The incidence has been observed in District Multan, R.Y.Khan, Sargodha and Bhakkar.

Wither tip: The incidence has been observed in District Multan, Khanewal, Vehari, Lodhran, Sahiwal, Pakpattan, Okara, Bahawalpur, Bahawalnagar, R.Y.Khan, Layyah, Lahore, Sargodha, Mianwali, Khushab, Bhakkar, Jhelum and Rawalpindi.

Leaf fall: The incidence has been observed in District Lodhran.

Fruit Fly: The infestation below ETL has been observed in District Vehari, Bahawalnagar, M.B.

Din, Sargodha and Bhakkar & above ETL has been observed in Mianwali.

Citrus Canker: The incidence has been observed in District Lodhran, Sahiwal, Bahawalpur, R.Y.Khan, Layyah, Sargodha, Mianwali, Khushab and Bhakkar.

Melanoses: The incidence has been observed in District Sargodha and Bhakkar.

Red Scale: The infestation below ETL has been observed in District Sargodha.

Cottony Cushion Scale: The infestation below ETL has been observed in District Sargodha.

Decline: The incidence has been observed in District Bhakkar.

Lemon Butterfly: The infestation has been observed above ETL in District Rawalpindi & below ETL has been observed in Sargodha.

Stem End Rot: The incidence has been observed in District Sargodha.

Mango

Scales: The infestation below ETL has been observed in District Multan, Khanewal, Vehari, Lodhran, Bahawalpur, R.Y.Khan and Muzaffargarh

Galls: The infestation below ETL has been observed in District Multan, Khanewal, Vehari, Lodhran, Bahawalpur, R.Y.Khan and Muzaffargarh.

Anthracnose: The incidence has been observed in District Multan, Khanewal, Vehari, Lodhran, Sahiwal, Pakpattan, Okara, Bahawalpur, Bahawalnagar, R.Y.Khan, D.G Khan, Muzaffargarh and Rajanpur & infestation has been observed below ETL in District Jhang.

Quick Decline: This is syndrome in which whole plant of mango dies off suddenly. Its incidence has been observed in District Multan, Vehari, Lodhran, Bahawalpur, Bahawalnagar and R.Y.Khan.

Gummosis: The incidence has been observed in District Multan, Vehari, R.Y.Khan and Muzaffargarh

Fruit Fly: The infestation below ETL has been observed in District Khanewal and Pakpattan.

Mango Hopper: The infestation Below ETL has been observed in District Multan, Vehari, Lodhran, Bahawalpur, R.Y.Khan and Muzaffargarh

Guava

Anthraxnose: The incidence has been observed in District Sahiwal.

Fruit Fly: The infestation below ETL has been observed in District Pakpattan, Sheikhpura, Nankana, Gujrat, Kasur, M.B. Din, Narowal & above ETL has been observed in District Narowal, Nankana, M.B. Din and Rawalpindi.

Decline: The incidence has been observed in District Lahore and Nankana.

Wither tip: The incidence has been observed in District Ferozwala.

Peach

Leaf Curl virus: The incidence has been observed in District Attock.

Snails: The infestation above ETL has been observed in District Rawalpindi.

Grapes

Powdery Mildew: The incidence has been observed in District Rawalpindi.

Loquat:

Wilt: The incidence has been observed in District Rawalpindi.

Citron

Whitefly: The infestation below ETL has been observed in District Lodhran.

PEST FORECAST FOR NEXT FORTNIGHT

Forecast of insect pests and diseases is given as under;

Vegetables Forecast

Whitefly

It is foretold that its population may increase on vegetables and crops during the next fortnight.

Jassid

Its population may sustain during the coming fortnight due to current weather conditions.

Thrips

Its population may decrease in the coming fortnight due to current weather conditions.

Fruit Fly

It is foretold that its population may increase on vegetables and crops during the next fortnight

Shoot Fly

Its population may sustain on Vegetable during next fortnight

Borer

Its population may sustain on Vegetable during next fortnight.

Spotted Bollworm

Its population may increase on Vegetable during next fortnight

Red Pumpkin Beetle

Its population may increase on Vegetable during next fortnight

Armyworm

Its population may increase owing to prevailing weather conditions which may continue during the coming fortnight.

Blight

Its incidence may increase owing to prevailing weather conditions which may continue during the coming fortnight

Downy Mildew

Its incidence may increase owing to prevailing weather conditions which may continue during the coming fortnight

Collar Rot

Its incidence may sustain owing to prevailing weather conditions which may continue during the coming fortnight

Virus

Its incidence may sustain owing to prevailing weather conditions which may continue during the coming fortnight

General Crops Forecast

Borer

Its population may sustain owing to prevailing weather conditions which may continue during the coming fortnight

Whitefly

Its population may increase owing to prevailing weather conditions which may continue during the coming fortnight

Armyworm

Its population may increase owing to prevailing weather conditions which may continue during the coming fortnight

Shoot Fly

Its population may sustain owing to prevailing weather conditions which may continue during the coming fortnight

Hopper

Its population may sustain owing to prevailing weather conditions which may continue during the coming fortnight

Stem Borer

Its population may sustain owing to prevailing weather conditions which may continue during the coming fortnight

Leaf Folder

Its population may sustain owing to prevailing weather conditions which may continue during the coming fortnight

Leaf Roller

Its population may sustain owing to prevailing weather conditions which may continue during the coming fortnight

Mango Orchard Forecast

Galls & Scales

Their population may sustain due to prevailing climatic conditions in the coming fortnight.

Thrips

Their population may decrease due to prevailing climatic conditions in the coming fortnight.

Hopper

Their population may sustain due to prevailing climatic conditions in the coming fortnight.

Fruit Fly

Their population may sustain due to prevailing climatic conditions in the coming fortnight.

Quick Decline

Its incidence may sustain due to current climatic conditions.

Anthracnose

Its incidence may increase due to prevailing climatic conditions in the coming fortnight.

Gummosis

Its incidence may increase due to prevailing climatic conditions in the coming fortnight.

Citrus Orchard Forecast

Citrus Psylla

Its infestation may sustain due to prevailing climatic conditions in the coming fortnight

Leaf Miner

Its infestation may sustain due to prevailing climatic conditions in the coming fortnight.

Fruit Fly

Its infestation may increase due to prevailing climatic conditions in the coming fortnight

Wither Tip

Its incidence may increase due to prevailing climatic conditions in the coming fortnight.

Citrus Canker

Its incidence may increase due to current climatic conditions during the next fortnight.

Leaf Fall

Its incidence may increase due to current climatic conditions during the next fortnight.

Slow Decline

Its incidence may sustain due to current climatic conditions during the next fortnight.

Gummosis

Its incidence may increase due to current climatic conditions during the next fortnight.

Citrus Scab

Its incidence may increase due to current climatic conditions during the next fortnight

Guava**Anthracnose**

Its incidence may increase due to current climatic conditions during the next fortnight.

Fruit Fly
Their population may sustain on Guava due to prevailing climatic conditions in the coming fortnight.

RECOMMENDATIONS**General Recommendations**

Motivate the farmers to follow the following recommendations.

- Keep fields free from weeds.

- Remove all plant debris and remains of vegetables immediately after harvest.
- Use suitable fungicides for the control of diseases on crops and vegetables.
- The control of armyworm on different vegetables / fodders is very necessary to check its multiplication by hand picking and graze the infected leaves. For its control suitable insecticides like IGR's should be used in consultation with field staff of Pest Warning and Extension Wing.
- Fallow fields should be ploughed up to destroy pupae of bollworms especially heliothis and armyworm.
- For jassid control, apply imidacloprid 25 WP @ 75gm/acre or imidacloprid 200 SL @ 60ml/acre or thiamethoxam 25 WDG @ 24gm/100 LOW.
- Mango orchards with heavy infection of anthracnose should be treated twice with suitable fungicides.
- Orchards should be treated with suitable pesticides thrice a year for the control of insect pests and diseases i.e. before flowering, after fruit setting and harvesting.
- For the control of fruit flies, keep the field neat and clean by eradicating the weeds, picking up of infested fruits and burying them properly and install pheromone (methyl eugenol) traps @ 3-5 traps /acre.

For Onion Thrips

- After harvesting remove & destroy the plant debris in ground
- Use early & quick maturing varieties
- Eradicate the weeds
- Spray spirotetramat+biopower(Movento)240 SC @ 125+125ml/acre

- Spray gamma cyhalothrin (Proaxis) 60 CS@ 100 ml/acre.

For Borers

- Sow resistant varieties
- Install light traps for adult moth collection
- Eradicate weeds
- Conserve and use biological control agents
- Collect infested fruits & bury them in soil
- Spray emamectin benzoate 5WDG @ 75gm/ acre

For Leaf Miner

- Remove & bury the infested leaves
- Spray bifenthrin 10% EC @ 250-320ml/100 liters of water
- Spray lufenuron (Match) 50EC 100ml/ 100 liters of water

For Jassid

- Sow resistant varieties
- Spray nitenpyram 50WDG @ 40gm/ acre

For Galls & Scales

- Remove & bury the infested leaves & twigs if minor attack occurs.
- Spray bifenthrin 10% EC @ 250-320ml/100 liters of water
- Spray spirotetramate 240Sc (Movento) @125ml/200 liters of water.
- Spray priproxyfen 50% Ec&Biopower @200ml /100 liters of water

For Fruit Fly

- Use methyl eugenol, the sex pheromone
- Use protein hydrolysate for female collection
- Conserve bio control agent *Opiuslongicaudatus*
- Collect & bury the fallen fruits
- Spread plastic sheet under plant canopy to disrupt its pupation in soil

- Spray Static spinosad ME 53% RB @ 40 gm for 8 plants in an acre (5 gm/ plant).

For Anthracnose

- Pruning of diseased branches of the tree
- Apply recommended fungicides with consultation of local Agriculture Department.

For Wither tip

- Prune & bury the dry twigs & branches
- Use Bordeaux mixture
- Apply 1 Kg ammonium sulphate with 10Kg well rotten farm-yard manure per tree

For Citrus Canker

- Select the Root Stock from disease-free tree
- Prune & burn the infected shoots
- During active growth season, apply copper based fungicides to all root stocks, grafted plants & other trees
- Use streptomycin sulphate 72SP @ 100gm/Acre.

For Quick Decline, Die Back And Gummosis

Disease Of Citrus And Mango

- Make "DAUR" around each plant at a distance of one and half feet to obstruct direct water access to the stem.
- Avoid injuries to plants.
- Apply paste of metalaxyl + mancozeb and lime at 1:8 to the injuries and stem up to 4 feet.
- Apply recommended insecticides on mango and citrus orchards on the appearance of insect pests.
- Apply recommended fungicides on mango and citrus orchards on the appearance of disease symptoms.
- In case of high infection, repeat fungicides application after 15 days interval.

- Control insect pests by applying suitable insecticides in consultation with Field Staff of Pest Warning and Extension Wing.

For Mealy Bug Management

- Monitor its population on every host plant and adopt appropriate control measures in consultation with Pest Warning / Extension Wings of Agriculture Department.
- Add mineral oil (diver) with insecticides at recommended ratio for spray on ornamental plants, field crops and vegetables for its effective control.
- Bury infested plants and weeds carefully in soil.
- Store cotton sticks away from water channels.
- Keep field crops, vegetables, ornamental plants, orchards, field bunds and water channels free from weeds.
- Eradicate weeds at their early stage.
- Prune the shrubs and trees infested with mealy bug.
- Spray recommended insecticides at prescribed doses.

Alternate Host Plants Of Mealy Bug

| Crops | Vegetables | Ornamentals | Weeds | Orchards |
|-----------|------------|-------------|-----------|----------|
| Sunflower | Okra | China rose | HazarDani | Citrus |
| Tobacco | Brinjal | Huddle | Amarantus | Mulbery |
| Jantar | Tomato | Cotton Rose | Bhakra | Ficus |
| | Chillies | Gul chain | Mako | Ber |
| | Pumpkin | Lantana | Sueda | |
| | | Din Ka Raja | Itsit | |
| | | Rat Ki Rani | Karund | |
| | | Anthorium | Aksan | |
| | | Gul-e-Daudi | Bathu | |
| | | Gainda | Puth | |

| | | | | |
|--|--|--|--------|--|
| | | | Kanda | |
| | | | Kanghi | |

For Whitefly & CLCuV

Management Of Whitefly

- Eradicate weeds acting as alternate host plants of whitefly and CLCV and dispose them off carefully.
- Motivate farmers to keep whitefly (vector of CLCV) at the lower ebb on alternate hosts.
- Avoid excessive use of nitrogen in vegetables and other crops.
- Avoid planting of CLCV susceptible ornamental plants.
- Install chrysopepla cards as biological control agent @ 8 cards/ acre. (cards are available at the labs. located in Vehari, Sahiwal&Okara districts)
- For whitefly control, apply any of the following pesticides on spring crops, vegetables and ornamental plants.
- Inoculums of CLCV prevail on various host plants throughout the year, therefore to combat the menace adopt following actions:
- Create awareness among the farming community to control this menace on alternate hosts.
- Eradicate weeds and other alternate host plants of CLCV.

Key Points

Keep strict vigilance and scout the field crops, fodders, vegetables and orchards regularly.

Alternate Host Plants Of Whitefly

| CROPS | VEGETABLES | ORCHARDS | WEEDS/ ORNAMENTAL | TREES |
|-----------|-------------|-------------------|----------------------|---------|
| Sunflower | Okra | Citrus | Gardenia | Shisham |
| Tobacco | Brinjal | Litchi | Mako | Sharin |
| | Cucurbits | Pomegranate | Maina | |
| | Tomato | Ber (Zizyphus) | Karund | |
| | Cabbage | Guava | Lehli | |
| | Cauliflower | Mulbery | | |
| | Peas | Papaya | | |
| | Potato | | | |
| | Onion | | | |
| | Spinach | | | |

Alternate Host Plants Of CLCuV

| CROPS | VEGETABLES | ORNAMENTAL | WEEDS |
|-----------|------------|-------------|-------------------|
| Sunflower | Okra | Ornamentals | Leh |
| Tobacco | Brinjal | Gurhal | Lehli |
| | Chillies | Chambeli | Mako |
| | Tomato | | Maina |
| | Potato | | Karund / Bathu |
| | Cucumber | | Gardenia |
| | | | Hazardani |
| | | | Rattanjot |
| | | | Sun Kukra |

ETLs OF DIFFERENT INSECT PESTS & DISEASES

| Name of Crop | Insect Pest/ Disease | ETL | Name of Crop | Insect Pest/ Disease | ETL |
|--------------|-------------------------|--|--------------|-------------------------|---|
| Maize | Shoot fly | 5% | Mango | Hopper | 5/ Leaf (In Summer) 1/ Leaf (In Winter) 10/ Inflorescence or Twig |
| | Stem borer | 5% | | Scales | 50 Scales / Leaf |
| | Helicoverpa | 5 % Cobs | | Fruit fly | 10% damage |
| | Armyworm | On Appearance | | Mealybug | On Appearance |
| Potato | Jassid | 3/Leaf | | Mango Midges | 10 spots/ twig or inflorescence |
| | Blight | On Appearance | | Gall Farming Insect | 10 galls / Leaf |
| Tobacco | Cutworm | 3% Attacked Plants | | Malformation | Low-Med-High |
| Sunflower | Helicoverpa | 1/5 Flowers | | Anthracoise | On Appearance |
| Vegetables | Red Pumpkin Beetle | 1/ 10 Plants (at seedling stage) 1/ Plants (at crop stage) | Citrus | Citrus Psylla | 6/ Leaf |
| | Hudda Beetle | 4/ Plant | | Leaf-miner | 10% affected leaves |
| | Fruit Borer | 10%on Brinjal 5% on Tomato | | Fruit fly | 10% affected fruits |
| | Diamond Back Moth | 3/ Leaf | | Withertip | Low-Med-High |
| | Helicoverpa | 5% fruit infestation | | Canker | Low-Med-High |
| | Fruit fly | 3 % fruit infestation | Guava | Fruit fly | 10% affected fruits (4-5 Pheromone traps/acre) |
| | Leaf-miner | 10 % leaves infested | | | |
| | Jassid | 1/Leaf on Cucurbits 2/ Leaf on Brinjal 3/ Leaf on Melons | | | |
| | Whitefly | 5/Leaf on Cucurbits 2/Leaf on Chillies, Cowpeas | | | |
| | Aphid | 5/Leaf | | | |
| | Powdery Mildew | Low-Med-High | | | |
| | Downy Mildew | Low-Med-High | | | |
| | Wilt | Only seed treatment | | | |
| | Root Rot | Only seed treatment | | | |
| | Collar Rot | Water must not touch the stem | | | |
| | Leaf Spot/ Blight | Spray on appearance | | | |