# Insect pests of citrus in Bangladesh

| **Sl. No.** | **Name of Crops** | **Name of insect pests** | **Scientific name** | **Status** |
| --- | --- | --- | --- | --- |
| 1 | Lemon (Elachi lebu) | Lemon butterfly | *Papilio demoleus* L. | Major |
| Lemon butterfly | Papilio polytes L. | Minor |
| Citrus Leaf miner | Phyllocnistis citrella St. | Major |
| Citrus red scale | Aonidiella aurantii Maskel | Minor |
| Citrus yellow scale | Aonidiella citrina Coq. | Minor |
| Citrus mealy bug | Pseudococcus filamentosus Cockrell | Minor |
| Citrus mealy bug | Pseudococcus citri (Risso) | Minor |
| Citrus mealy bug | Pseudococcus virgatus Cockrell | Minor |
| Citrus psyllid bug | Diaphornia citri Kuwayana | Minor |
| Citrus aphid | Toxoptera aurantii Boyer de Fonscolombe | Minor |
| Citrus blackfly | Aleurocanthus woglumi Ashby | Minor |
| Citrus whitefly | Dialeurodes citri Ashmead | Minor |
| Citrus leaf folder | Psorosticha zizyphi Stainton | Minor |
| Bark and stem borer | Indarbela quadrinotata (Walker) | Minor |
| Citrus stem borer | Chelidonium cinctum Guerin-Meneville | Minor |
| Thrips | Scirtothrips citri Moulton | Minor |
| Termite | Odontotermes obesus Rambur | Minor |
| Citrus red mite | Tetranychus spp. | Minor |
| 2 | Lime (Kagozi lebu) | Lemon butterfly | *Papilio demoleus* L. | Major |
| Lemon butterfly | Papilio polytes L. | Minor |
| Citrus Leaf miner | Phyllocnistis citrella St. | Major |
| Citrus red scale | Aonidiella aurantii Maskel | Minor |
| Citrus yellow scale | Aonidiella citrina Coq. | Minor |
| Citrus mealy bug | Pseudococcus filamentosus Cockrell | Minor |
| Citrus mealy bug | Pseudococcus citri (Risso) | Minor |
| Citrus mealy bug | Pseudococcus virgatus Cockrell | Minor |
| Citrus psyllid bug | Diaphornia citri Kuwayana | Minor |
| Citrus blackfly | Aleurocanthus Woglumi Ashby | Minor |
| Citrus Leaf folder | Psorosticha zizyphi Stainton | Minor |
| Bark and stem borer | Indarbela quadrinotata (Walker) | Minor |
| Thrips | Scirtothrips citri Moulton | Minor |
| Termite | Odontotermes obesus Rambur | Minor |
| Citrus red mite | Tetranychus spp. | Minor |
| 3 | Mandarin (Kamala) | Lemon butterfly | *Papilio demoleus* L. | Minor |
| Lemon butterfly | Papilio polytes L. | Minor |
| Citrus Leaf miner | Phyllocnistis citrella St. | Major |
| Citrus red scale | Aonidiella aurantii Maskell | Minor |
| Citrus yellow scale | Aonidiella citrina Coq. | Minor |
| Citrus mealy bug | Pseudococcus filamentosus Cockrell | Minor |
| Citrus mealy bug | Pseudococcus citri (Risso) | Minor |
| Citrus mealy bug | Pseudococcus virgatus Cockrell | Minor |
| Citrus psyllid bug | Diaphornia citri Kuwayana | Minor |
| Orange fruitfly | Bactrocera dorsalis Hendel | Major |
| Citrus aphid | Toxoptera aurantii Boyer de Fonscolombe | Minor |
| Citrus black fly | Aleurocanthus woglumi Ashby | Minor |
| Citrus leaf folder | Psorosticha zizyphi Stainton | Minor |
| Orange bug | Rhynchocoris humeralis Thunberg | Minor |
| Orange spined bug | Biprorulus bibax Breddin | Major |
| Bark and stem borer | Indarbela quadrinotata (Walker) | Minor |
| Citrus stem borer | Chelidonium cinctum Guerin-Meneville | Minor |
| Thrips | Scirtothrips citri Moulton | Minor |
| Termite | Odontotermes obesus Rambur | Minor |
| Citrus red mite | Tetranychus spp. | Minor |
| 4 | Sweet orange (Malta) | Lemon butterfly | *Papilio demoleus* L. | Major |
| Lemon butterfly | Papilio polytes L. | Minor |
| Citrus Leaf miner | Phyllocnistis citrella St. | Major |
| Citrus red scale | Aonidiella aurantii Maskell | Minor |
| Citrus yellow scale | Aonidiella citrina Coq. | Minor |
| Citrus mealy bug | Pseudococcus filamentosus Cockrell | Minor |
| Citrus mealy bug | Pseudococcus citri (Risso) | Minor |
| Citrus mealy bug | Pseudococcus virgatus Cockrell | Minor |
| Citrus psyllid bug | Diaphornia citri Kuwayana | Minor |
| Citrus psyllid bug | Euphalerus citrii Kuwayana | Minor |
| Orange fruitfly | Bactrocera dorsalis Hendel | Major |
| Citrus aphid | Toxoptera aurantii Boyer de Fonscolombe | Minor |
| Citrus blackfly | Aleurocanthus woglumi Ashby | Minor |
| Citrus leaf folder | Psorosticha zizyphi Stainton | Minor |
| Orange spined bug | Biprorulus bibax Breddin | Major |
| Bark and stem borer | Indarbela quadrinotata (Walker) | Minor |
| Citrus stem borer | Chelidonium cinctum Guerin-Meneville | Minor |
| Thrips | Scirtothrips citri Moulton | Minor |
| Termite | Odontotermes obesus Rambur | Minor |
| Citrus red mite | Tetranychus spp. | Minor |
| 5 | Pummelo (Batabi lebu) | Lemon butterfly | *Papilio demoleus* L. | Major |
| Lemon butterfly | Papilio polytes L. | Minor |
| Citrus leaf miner | Phyllocnistis citrella St. | Major |
| Citrus red scale | Aonidiella aurantii Maskell | Major |
| Citrus yellow scale | Aonidiella citrina Coq | Minor |
| Citrus mealy bug | Pseudococcus filamentosus Cockrell | Major |
| Citrus mealy bug | Pseudococcus citri (Risso) | Major |
| Citrus mealy bug | Pseudococcus virgatus Cockrell | Minor |
| Citrus psyllid bug | *Diaphornia citri* Kuwayana | Minor |
| Orange fruitfly | Bactrocera dorsalis Hendel | Minor |
| Citrus blackfly | Aleurocanthus woglumi Ashby | Minor |
| Citrus leaf folder | Psorosticha zizyphi Stainton | Minor |
| Bark and stem borer | Indarbela quadrinotata (Walker) | Minor |
| Citrus stem borer | Chelidonium cinctum Guerin-Meneville | Minor |
| Thrips | Scirtothrips citri Moulton | Minor |
| Termite | Odontotermes obesus Rambur | Minor |
| Citrus red mite | Tetranychus spp. | Minor |
| 6 | Citrone (Jamir) | Lemon butterfly | Papilio demoleus L. | Major |
| Lemon butterfly | P. polytes L. | Minor |
| Citrus leaf miner | Phyllocnistis citrella St. | Major |
| Citrus red scale | Aonidiella aurantii Maskel | Minor |
| Citrus yellow scale | Aonidiella citrina Coq. | Minor |
| Citrus mealy bug | Pseudococcus filamentosus Cockrell | Minor |
| Citrus psyllid bug | Diaphornia citri Kuwayana | Minor |
| Citrus black fly | Aleurocanthus woglumi Ashby | Minor |
| Citrus leaf folder | Psorosticha zizyphi Stainton | Minor |
| Thrips | Scirtothrips citri Moulton | Minor |
| Citrus red mite | Tetranychus spp. | Minor |
| 7 | Satkara | Lemon butterfly | Papilio demoleus L. | Major |
| Lemon butterfly | P. polytes L. | Minor |
| Citrus leaf miner | Phyllocnistis citrella St. | Major |
| Citrus red scale | Aonidiella aurantii Maskel | Minor |
| Citrus yellow scale | Aonidiella citrina Coq. | Minor |
| Citrus mealy bug | Pseudococcus filamentosus Cockrell | Minor |
| Citrus psyllid bug | Diaphornia citri Kuwayana | Minor |
| Citrus black fly | Aleurocanthus woglumi Ashby | Minor |
| Citrus leaf folder | Psorosticha zizyphi Stainton | Minor |
| Thrips | Scirtothrips citri Moulton | Minor |
| Citrus red mite | Tetranychus spp. | Minor |
| 8. | Ada lebu | Lemon butterfly | Papilio demoleus L. | Major |
| Lemon butterfly | P. polytes L. | Minor |
| Citrus leaf miner | Phyllocnistis citrella St. | Major |
| Citrus red scale | Aonidiella aurantii Maskel | Minor |
| Citrus yellow scale | Aonidiella citrina Coq. | Minor |
| Citrus mealy bug | Pseudococcus filamentosus Cockrell | Minor |
| Citrus psyllid bug | Diaphornia citri Kuwayana | Minor |
| Citrus black fly | Aleurocanthus woglumi Ashby | Minor |
| Citrus leaf folder | Psorosticha zizyphi Stainton | Minor |
| Thrips | Scirtothrips citri Moulton | Minor |
|  |  | Citrus red mite | Tetranychus spp. | Minor |
| 9 | Jara lebu | Lemon butterfly | Papilio demoleus L. | Major |
| Lemon butterfly | P. polytes L. | Minor |
| Citrus leaf miner | Phyllocnistis citrella St. | Major |
| Citrus red scale | Aonidiella aurantii Maskel | Minor |
| Citrus yellow scale | Aonidiella citrina Coq. | Minor |
| Citrus mealy bug | Pseudococcus filamentosus Cockrell | Minor |
| Citrus psyllid bug | Diaphornia citri Kuwayana | Minor |
| Citrus black fly | Aleurocanthus woglumi Ashby | Minor |
| Citrus leaf folder | Psorosticha zizyphi Stainton | Minor |
| Thrips | Scirtothrips citri Moulton | Minor |
| Citrus red mite | Tetranychus spp. | Minor |

**List of Insect Pests distribution of Citrusin Bangladesh (Crop wise)**

| **Sl. No.** | **Common name** | **Scientific name (family and order)** | **Name of the crops attacked** | **Status** |
| --- | --- | --- | --- | --- |
| 1 | Lemon butterfly | *Papilio demoleus* L. (Papilionidae: Lepidoptera) | Lemon, Lime, Mandarin, Sweet orange & other citrus | Major |
| 2 | Lemon butterfly | *Papilio polytes* L. (Papilionidae: Lepidoptera) | Lemon, Lime, Mandarin, Sweet orange | Minor |
| 3 | Citrus leaf miner | *Phyllocnistis citrella* St.(Phyllocnistidae:Lepidoptera) | All Citrus | Major |
| 4 | Citrus red scale | *Aonidiella aurantii* Maskell (Coccidae: Hemiptera) | All Citrus | Minor |
| 5. | Citrus yellow scale | *Aonidiella citrina* Coq (Coccidae: Hemiptera) | All Citrus | Minor |
| 6 | Citrus mealy bug | *Pseudococcus filamentosus* Cockrell (Pseudococcidae: Homoptera) | All Citrus | Major |
| 7 | Citrus psyllid bug | *Diaphornia citri* Kuwayana (Psyllidae: Homoptera) | All Citrus | Minor |
| 8 | Orange fruitfly | *Bactrocera dorsalis* Hendel (Tephritidae: Diptera) | Mandarin, Sweet orange, Pummelo | Major |
| 9 | Citrus aphid | *Toxoptera aurantii* Boyer de Fonscolambe (Aphididae: Homoptera) | Mandarin, Sweet orange, Lemon | Major |
| 10 | Citrus blackfly | *Aleurocanthus woglumi* Ashby (Aleyrodidae: Homoptera) | All Citrus | Minor |
| 11 | Citrus Leaf folder | *Psorosticha zizyphi* Stainton (Oecophoridae: Lepidoptera) | All Citrus | Minor |
| 12 | Orange bug | *Rhynchocoris humeralis* Thunberg (Pentatomidae: Hemiptera) | Mandarin | Minor |
| 13 | Orange spined bug | *Biprorulus bibax* Breddin (Pentatomidae: Hemiptera) | Mandarin, Malta | Major |
| 14 | Bark and Stem borer | *Indarbela quadrinotata* (Walker) (Metarbelidae: Lepidoptera) | Mandarin, Sweet orange, Lemon, Lime, Pummelo and other citrus | Minor |
| 15 | Citrus Stem borer | *Chelidonium cinctum* Guerin-Meneville (Cerambycidae: Coleoptera) | Lemon, Mandarin, Sweet orange, Pummelo and other citrus | Minor |
| 16 | Thrips | *Scirtothrips citri* Moulton (Thripidae: Thysanoptera) | All Citrus | Minor |
| 17 | Termite | *Odontotermes obesus* Rambur (Termitidae: Isoptera) | All Citrus | Minor |
| 18 | Citrus red mite | *Tetranychus* spp. (Tetranychidae: Acarina) | Lemon, Lime, Mandarin, Sweet orange & other citrus | Minor |

**Figure-1: Photographs of Major Insect pests of Citrus**









Lemon Butterfly

Citrus Leaf Miner

Citrus Fruit Fly

Larvae of Citrus Stem Borer

Citrus White Fly

Citrus Mealy Bug





**Diseases of citrus with causal organism in Bangladesh**

| **SL. No** | **Crop** | **Disease** | **Causal Organism** | **Status** |
| --- | --- | --- | --- | --- |
| 1 | Lemon (Elachi lebu) | Die-back | *Colletotrichum* spp. | Major |
| Scab | Elsinoe facetii | Minor |
| Black rot | *Guignardia citricarpa* | Minor |
| Canker | *Xanthomonas campestris* | Major |
| Greening | Greening Fastidious Bacteria (GFB) | Minor |
| Nematode | *Tylenchus semepenitrans, Pratylenchus* sp., *Radopholus similis* | Minor |
| 2 | Lime (Kagozi lebu) | Die-back | *Colletotrichum* spp. | Major |
| Gummosis | *Phytophthora citrophthora* | Minor |
| Scab | Elsinoe facetii | Minor |
| Black rot | Guignardia citricarpa | Minor |
| Brown spot | *Cercospora angolensis* | Minor |
| Canker | Xanthomonas campestris | Minor |
| Greening | Greening Fastidious Bacteria (GFB) | Minor |
| Nematode | *Tylenchus semepenitrans, Pratylenchus* sp., *Radopholus similis* | Minor |
| 3 | Pummelo (Batabi lebu) | Gummosis | *Phytophthora citrophthora* | Major |
| Die-back | *Colletotrichum* spp. | Minor |
| Nematode | *Tylenchus semepenitrans, Pratylenchus* sp., *Radopholus similis* | Minor |
| 4 | Mandarin (Kamala) | Die-back | *Colletotrichum* spp. | Major |
| Gummosis | *Phytophthora citrophthora* | Minor |
| Scab | Elsinoe facetii | Minor |
| Black rot | *Guignardia citricarpa* | Minor |
| Canker | Xanthomonas campestris | Major |
| Greening | Greening Fastidious Bacteria (GFB) | Minor |
| Dry rot | *Rhizoctonia/Fusarium* spp. | Major |
| Nematode | *Tylenchus semepenitrans, Pratylenchus* sp., *Radopholus similis* | Minor |
| 5 | Sweet orange (Malta) | Die-back | *Colletotrichum* spp. | Minor |
| Gummosis | *Phytophthora citrophthora* | Minor |
| Brown spot | *Cercospora angolensis* | Minor |
| Greening | Greening Fastidious Bacteria (GFB) | Minor |
| Nematode | *Tylenchus semepenitrans, Pratylenchus* sp., *Radopholus similes* | Minor |
| 6 | Citrone (Jamir) | Die-back | *Colletotrichum* spp. | Minor |
| Gummosis | *Phytophthora citrophthora* | Minor |
| Scab | Elsinoe facetii | Minor |
| Black-spot | Guignardia citricarpa | Minor |
| Brown spot | *Cercospora angolensis* | Minor |
| Canker | *Xanthomonas* *campestris* | Minor |
| Nematode | *Tylenchus semepenitrans, Pratylenchus* sp., *Radopholus similes* | Minor |
| 7 | Satkara | Die-back | *Colletotrichum* spp. | Major |
| Gummosis | *Phytophthora citrophthora* | Minor |
| Scab | *Elsinoe facettii* | Minor |
| Canker | *Xanthomonas* *axonopodis* | Minor |
| Sooty mold | *Capnodium* spp | Major |
| Nematode | *Tylenchus semepenitrans, Pratylenchus* sp., *Radopholus similes* | Minor |
| 8 | Ada lebu | Canker | *Xanthomonas* *campestris* | Major |
| Scab | *Elsinoe facetii* | Minor |
| Gummosis | *Phytophthora citrophthora* | Major |
| Die-back | *Colletotrichum* spp. | Major |
| Greening | Greening Fastidious Bacteria (GFB) | Minor |
| Sooty mold | *Capnodium* spp | Minor |
| Nematode | *Tylenchus semepenitrans, Pratylenchus* sp., *Radopholus similes* | Minor |
| 9 | Jara lebu | Canker | *Xanthomonas* *campestris* | Minor |
| Die-back | *Colletotrichum* spp. | Major |
| Scab | *Elsinoe facetii* | Minor |
| Greening | Greening Fastidious Bacteria (GFB) | Minor |
| Sooty mold | *Capnodium* spp | Minor |
| Nematode | *Tylenchus semepenitrans, Pratylenchus* sp., *Radopholus similes* | Minor |

**Crop wise distribution of Citrus disease in Bangladesh**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. No.** | **Disease** | **Causal Organism** | **Affected Citrus** |
| 1 | Die-back | *Colletotrichum* spp. | Lemon, Lime, Mandarin, Malta, Jamir |
| 2 | Canker | Xanthomonas campestris | Lemon, Lime, Mandarin, Jamir |
| 3 | Gummosis | *Phytophthora* *citrophthora* | Lime, Mandarin, Malta, Pummelo, Jamir |
| 4 | Scab | Elsinoe facetii | Lemon, Lime, Mandarin, Jamir |
| 5 | Black rot | Guignardia citricarpa | Lemon, Lime, Mandarin, Jamir |
| 6 | Greening | Greening Fastidious Bacteria (GFB) | Lemon, Lime, Mandarin, Malta, Jamir |
| 7 | Brown spot | Cercospora angolensis | Lemon, Lime, Malta, Jamir |
| 8 | Blue/Green mold | Penicillium sp. | Mandarin, Malta, Lemon, Lime |
| 9 | Sooty mould | Capnodium sp. | Mandarin, Malta, Satkara, Jara lebu, Ada lebu |
| 10 | Pink | Botrybasidium salmonicolor | Mandarin, Malta, Jara lebu, Ada lebu |
| 11 | Nematode | *Tylenchus semepenitrans, Pratylenchus* sp., *Radopholus similis* | All Citrus |

**Figure-2: Photographs of Major Diseases of Citrus**













Citrus Canker

Citrus Die-Back

Citrus Greening

Citrus Gummosis

Sooty Mold

Greasy Spot