

**A  
CONCISE GUIDE  
OF  
PESTS OF TOMATOES,  
POTATOES, PEPPER  
AND EGGPLANTS**



**Ministry of Agriculture and Fisheries  
Department of Plant Protection Sana'a**

This concise guide should help Yemeni extensionists and farmers to identify the most important pests of tomatoes, potatoes, pepper and eggplants.

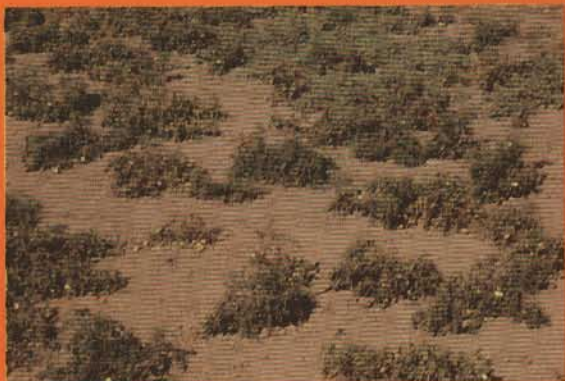
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2 b-4 a	Red spidermites	<i>Tetranychus</i> spp.
4 b	Cotton aphid	<i>Aphis gossypii</i>
5 a	Potato aphid	<i>Macrosiphum euphorbiae</i>
5 b	Green aphid	<i>Acyrtosiphon gossypii</i>
6	Lace bug	<i>Urentius hystricellus</i>
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21 b-22	Snails and Slugs	Not yet determinated
23 a	Leatherjackets	Not yet determinated
23 b-25	Cutworm	<i>Agrotis segetum</i>
26 a	Wireworm	<i>Agriostis</i> spp.
26 b	Stem borer	Not yet determinated
27 a	Pollen beetle	<i>Mylabris</i> sp.
27 b	Leaf miner	<i>Liriomyza</i> sp.
28	Termites	<i>Microtermes</i> , <i>Microcerotermes</i> spp.





1. a.

**Root – knot nematode infestation.**

Attack occurs in patches in a (tomato, potato) field. Nematodes, eelworms pierce and suck the roots or rootstock and damage the plants, reducing growth and quality. Secondary fungi or bacterial infections appears in association.



1. b.

– infested roots of a tomato plant. Similar symptoms appear on eggplant and okra.



2. a.

– infested potato tubers.

①



2. b.

**Red spidermite (sucking).**

Severely infested tomato plant (plant collapse). Similar in eggplants.

②



3. a.  
– infested tomato leaf  
(underside of the leaf).



3. b.  
– typical symptoms on the upper leaf side of  
tomato.



4. a.  
– sucking on eggplant leaf.

Typical symptoms on the upper leaf side. Attack starts on the underside of the leaf. Pepper and potato are less attacked. For identification use a lens.



4. b.  
**Cotton aphid.**

Sucking on the underside of the leaf on pepper, similar in eggplants and tomatoes. The colour of the aphids varies from yellow-green to dark green. The picture also show spidermite attack.





5. a.  
**Potato aphid** (sucking).  
 Infested tomato leaf (underside of the leaf). Similar on potato.



5. b.  
**Green aphid.**  
 Sucking on the underside of pepper leaf. Not to be confused with green peach and foxglove aphids. Aphids are transmitters of several viruses. Similar on potato, eggplant and tomato.



6. a.  
**Lace bug.**  
 Typical early symptoms on the upper leaf side of eggplant.



6. b.  
 — advanced symptoms on eggplant leaves. The underside is additionally covered with dirt. Only eggplants are attacked. If severe infestation occurs, plants may die.



7. a.

**White fly** – adults.

Sucking on the underside of the leaf. Attack mainly tomato, eggplant and pepper. Transmitters of several viruses (see disease and disorders of tomato).



7. b.

– larvae and nymphs. Larvae sucking on the underside of the leaf.



8. a.

– tomato plant. Heavily attacked young plants may not grow at all or even die.



8. b.

– damaged pepper plant. Similar in eggplant.





9. a.

**Capsid bug** – adult (sucking).

Because of similarity in size, colour and habits, adults and nymphs can be confused with leaf-hoppers.



9. b.

– nymph



10. a.

– damage symptoms on tomato plant.



10. b.

**Green stink bug** – adult.

Sucking on potato leaf.



11. a.  
– typically damaged plant part (potato and to-  
mato).



11. b.  
– damaged tomato fruits.



12. a.  
**Leafhopper – Jassid (sucking).**  
Beside serious leaf damage, jassids are transmit-  
ters of some virus diseases on potato and MLO  
on tomato (see diseases of tomato).



12. b.  
– typical symptoms on the upper leaf side of  
potato. Similar on tomato.





13. a.  
Potato tuber moth.



13. b.  
— greenish larvae. Larvae feeding inside a tomato fruit. Severe attack leads to total loss in the field.



14. a.  
— typical part of infested tomato stem. Similar to potato and tobacco.



14. b.  
— severely damaged potato branch.



15. a.

– leaf mining symptoms on potato leaves. Similar on tomato and eggplants. Severe attack leads to reduced growth and yield.

(C)



15. b.

– attacked young potato leaves are webbed to a cluster.



16. a.

– infested potato tuber. Larvae are red-brown coloured.

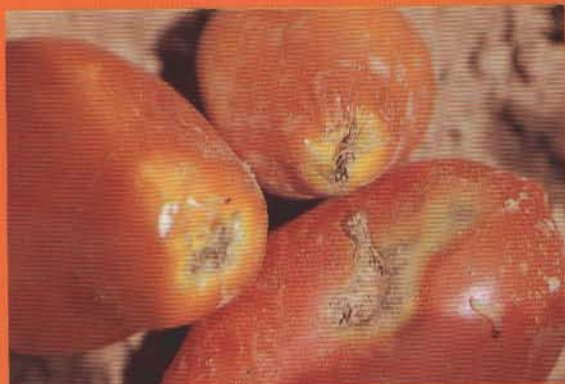


16. b.

– damaged potato tuber.  
During storage the degree of infestation may reach 80% within several weeks, if tubers are not stored in a cool-house.

(C)





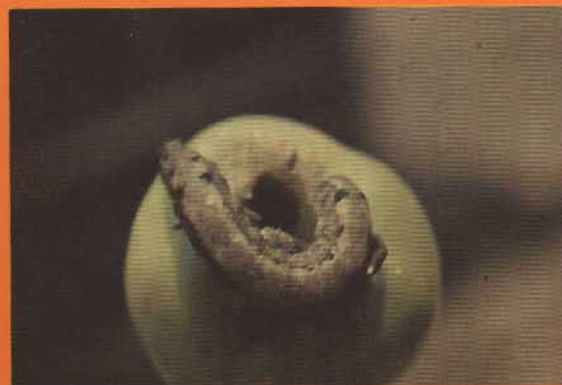
17. a.  
– typical tuber moth attack on tomato fruit.



18. a.  
– typical greenish coloured larva on tomato.



17. b.  
**American bollworm.**  
Larvae attack fruits mainly on upper parts of plants.



18. b.  
**Cotton leaf worm.**  
Larva feeding on tomato fruit. The colour is typically greyish-dark and can be confused with cutworm (see picture 18). Larvae mainly attack fruits on the lower part of plants and hide above the soil during daytime.



19. a.  
– young larvae feeding inside a pepper fruit (typical whitish coloured larvae).



20. a.  
– severe attack on pepper plant. Note the typical window-like damage which is caused by the very young larvae.



19. b.  
– typical symptom on pepper fruit.



20. b.  
– larva feeding on a pepper leaf (typical colour).





21. a.  
– adult (night-flying moth).



21. b.  
**Snails and Slugs** (soil hiding). Typically damaged tomato fruits. Occurs mainly on fruits near to the soil. Similar symptoms to leatherjacket, cutworm and cotton leafworm attack.



22. a.  
– snails.



22. b.  
– slugs.



23. a.

**Leatherjacket** (crane-flies).

Soil living larva (has no legs) feeds on tomato fruit. Can be confused with cutworms because of similarity to colour, size and feeding habits.



23. b.

**Cutworm**

Larvae mainly attack fruits near to the soil and hide in the soil during daytime. Species vary in colour.



24. a.

– adult (night flying moth)



24. b.

– leaf damage on young pepper plant. Larvae feed at night.





25. a.  
– damaged potato tuber.



26. a.  
**Wireworm** (beetle).  
Soil living larva attack potato tuber. Roots and stems can also be damaged.



25. b.  
– stem damage on potato. Similar on tomato and other plants.



26. b.  
**Stem borer** damage on potato. Larva is whitish in colour.



27. a.  
**Pollen beetle.**  
Feeds only on ripe tomato fruits.



27. b.  
**Leaf miner** damage on tomato leaf.  
Headless larva of a fly is mining inside the leaf.  
Severe damage occurs mainly on young plants of tomato.



28. a.  
**Termites** or white ants  
All plant stages can be attacked.



28. b.  
– typical galleries on damaged stem of pepper.  
Similar on tomato and other plants.