



Non-Insect Pests and Their Management

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The main aimed to document the occurrence of non insect pest of deferent crops grown in India. It is estimated that production losses due to insect pests and non insect pest are around 30 per cent in crop. Non-insect pests are enormous and can cause significant damage to our agriculture. You can't kill some of the vertebrates as they are protected under wildlife (Protection) Act 1972. One must always select eco-friendly options for pest management rather than just relying on chemical control which often cause environmental pollution. One should not hesitate in controlling the non-insects like phytophagous nematodes and mites, in case they attain pest status. There are friendly nematodes and predatory mites also which feed either on other phytophagous species or other organisms, directly or indirectly injurious to us. Crabs, millipedes, snails and slugs are specific to certain situations, often associated with aquatic ecosystems hence should be managed involving community

Like non-insect pests also cause serious damage to the crop plants in the field and stored grains in the storage. Some of the common non-insect pests includes **mites, rodents, birds, wild boar, elephants** etc. They cause damage both in the field & storage.



1. Mites



2. Rodents



3. Crabs



4. Birds



5. Wild boar



6. Elephants etc.



Indian mole rat, *Bendicota bengaliensis*



House rat / black rat, *Rattus rattus*



House mouse, *Mus musculus*

MANAGEMENT (in field & storage)

- Keep the bunds clean.
- Trim the bunds periodically.
- Tie the perforated polythene bags or cloth bags containing phorate10G to the sticks/poles in the field.
- Set-up traps for trapping.
- Insert aluminium phosphide tablets into the live burrows & plug them with soil.
- Baiting with zinc phosphide or bromadiolone.

Crabs

- They cut the young paddy plants near the ground level & carry them to their burrows for feeding.



Paratelephusia hydrodrumus

Management

- Apply FYM at the time of puddling which reduces the damage

Birds

1. Parrot's



Psittacula krameri



Psittacula cynocephali



Psittacula spp



Damaged head



Psittacula spp

2. House sparrows



Passer domesticus



Damage

3. Crows



Corvus splendens

4. Pigeon



Columba livia

MANAGEMENT

- Installation of a reflector or shining metallic ribbon with red or yellow on one side & shining white on other side.
- Beating of drum.
- Cover the entire field with fish net, if crop is grown for seed production *etc.*

Wild boar



MANAGEMENT

- Place the scarecrows around the field.
- Tie the scarecrows to the sticks/poles in the field.
- Tie the perforated polythene bags or cloth bags containing phorate 10G to the sticks in the field.



- Solar fencing.
- Use 'Ecodon'.

Elephants



Management :

- Make deep & wide trenches around the field.

Conclusion

Insects and other invertebrates like nematodes, mites, snails, slugs, etc. vertebrates like rats, birds, jackals also cause damage of course, insects are not the only pests that can cause economic damage to a crop. We all know that weeds, diseases, snails, rats and birds can be equally or even more devastating. Although the ecosystem doesn't have nearly the same innate ability to take care of these pests and may need help, their economic control is also dependent on sound crop management practices that can prevent or minimize damage.

References:

http://www.agritech.tnau.ac.in/expert_system/paddy/cpnoninsectpests.html