Reference: - eagri.org

PESTS OF WHEAT

1.Wheat Aphid: (*Macrosiphum miscanthi)*

Host range: Wheat, barley, oats, *Cynodon dactylon*

Damage symptoms

- Like other aphids, the nymphs and adults suck the sap from plants, particularly from their ears
- They appear on young leaves or ears in large numbers during the cold and cloudy weather.
- The damage is particularly severe in years of cold and cloudy weather.

ETL: 5 aphids/ear head

Management

- Spray 375 ml of dimethoate 30 EC or oxydemeton methyl 25 EC or monocrotophos 36SL in 500 L of water per ha.
- Since the aphids appear first on the borders of the crop, spray only the infected strip to check further spread.

2. Armyworm: *Mythimna separate*

Host range: Wheat, sugarcane maize, jowar, bajra and other graminaceous crops.

Damage symptoms

- The freshly emerged larvae spin threads from which they suspend themselves in the air and then with the help of air currents reach from one plant to another
- In the early stages, they feed on tender leaves in the central whorl and later feed on older leaves and skeletonize them totally.
- In the case of a severe attack, whole leaves, including the mid-rib, are consumed and the field looks as if grazed by cattle.
- The pest may also eat away ears, including the awns and immature grains.

Management:

- The pest can be suppressed by collecting and destroying the caterpillars.
- Spray 500 ml of dichlorvos 85 SL or 3 kg of carbaryl 50 WP or 1.0 L of quinalphos 25 EC in 500 L of water per ha.

3. Ghujhia Weevil: *Tanymecus indicus*

Host range: Germinating Rabi crops *viz*.,Wheat, barley, gram and mustard

Damage symptoms

- Only adults feed on leaves and tender shoots of the host plants. They cut the germinating seedlings at the ground level.
- The damage is particularly serious during October- November when the *rabi* crops are germinating.

Management: Dust carbaryl or malathion 5 D @ 25 kg per ha.

4. Gram Pod Borer: *Helicoverpa armigera*

- The gram pod borer attacks wheat at maturity.
- It feeds on the grains in the ear heads.
- The damage is more where wheat follows cotton

Management

- Spray 3 kg of carbaryl 50 WP or 2.0 L of quinalphos 25 EC in 500 L of water/ha.

5. Termites: Odontotermes *obesus*

- Termites damage the wheat crop soon after sowing and near maturity.
- The damaged plants dry up completely and are easily pulled out.
- The plants damaged at later stages give rise to white ears.

Management

- Treat the seed @ 4 ml of chlorpyriphos 20 EC or 7ml of endosulfan 35 EC/kg of seed.
- If the attack is noticed in the standing crop, dilute 2.5 L of endosulfan 35 EC in 5 L of water and mix it with 50 kg of soil and broadcast evenly in one hectare, followed by light irrigation.

6. Molya Nematode / Cyst nematode: *Heterodera avenae*

Host range: Wheat, barley, oats and rye

Damage symptoms

- Attacked plants remain stunted and give a shriveled unhealthy appearance.
- The main root remains short or bunchy, bearing small galls.
- In case of severe infestation, the seedlings may fail to come out of the soil.
- The plants that escape the early damage produce short stalks and ears, yielding a poor harvest.

Management

- Follow crop rotation with non host crops mustard, pulses, fenugreek or carrot for one or two years
- Grow cyst nematode resistant wheat Raj MR-1 or barley RD 2035 or RD 2052
- Plough two to three times during summer
- Apply carbofuran @ 45 kg/ha

7. Wheat-gall Nematode: *Anguina tritici*

Host range: Rye, spelt and emer. Oats and barley are immune.

Damage symptoms

- Affected plants are more or less stunted and their leaves are wrinkled, rolled or twisted.
- A variable number of grains in an infested ear may produce galls.
- The diseased ears are shorter and thicker than the healthy ones and the glumes are spread farther apart.

Management

- The wheat gall nematode can be controlled by separating the galls from the wheat seed by floating them on water in a tub. The galls, being lighter, float on the surface and may be skimmed off.
- The pest can also be suppressed by sowing clean seed in uninfested soil. Only one year's fallowing is sufficient to eradicate this nematode from the fields.

Minor pest

8.	Aphid	*Schizaphis graminum and Rhopalosiphum maidis*	Aphididae	Hemiptera
9.	Hopper	*Laodelphax striatella*	Delphacidae	Hemiptera
		Pyrilla perpusilla	Lophopidae	Hemiptera
10.	Jassids	*Amrasca* spp	Cicadellidae	Hemiptera
11.	Wheat bug	*Eurygaster maura*	Pentatomidae	Hemiptera
12.	Wheat thrips	*Anaphothrips favicinctus*	Thripidae	Thysanoptera
13.	Cut worms	*Agrotis* spp.	Noctuidae	Lepidoptera
		Marasmia trapezalis	Pyraustidae	Lepidoptera
14.	Pink borer	*Sesamia inferens*	Noctuidae	Lepidoptera
15.	Shootfly	*Atherigona naqvii* and *A. orzae*	Muscidae	Diptera
16.	Whorl maggot	*Hydrellia griseola*	Ephydridae	Diptera
17.	Flea beetle	*Chaetocnema basalis*	Chtysomelidae	Coleoptera