

**Ex No: 14**

**Date:**

## **IDENTIFICATION OF DIFFERENT NON-INSECT PESTS:**

### **BIRDS, RODENTS, CRABS AND SNAILS**

#### **Objective:**

To study the characteristics and nature of damage of different non-insect pests viz., rodents, birds, crabs, snails & slugs, squirrels and other mammalian pests.

**Bird pests:** The major pests of agricultural importance are crow, sparrow, parrot and pigeon.

#### **1. Crow: *Corvus splendens***

**Kingdom:** Animalia  
**Phylum:** Chordata  
**Class:** Aves (Birds)  
**Order:** Passeriformes  
**Family:** Corvidae

- Plumage is glossy black, except for the nape, sides of the head, upper back and breast, which are grey.
- Bill, legs, and feet also black.
- Sexes alike.

#### **2. House Sparrow: *Passer domesticus***

**Order:** Passeriformes  
**Family:** Passeridae

- Small, seed-eating passerine bird with thick, conical bill and pink legs.
- **Adult male:** Gray crown, black throat, upper breast, and small mask; less black on throat in winter. Grayish side of neck and underparts. Rusty-brown nape and upperparts. Black streaks on back. White patch in wing. Gray rump. Black bill in summer; yellowish in winter.
- **Female and immature:** Gray-brown crown. Buffy line extends rearward from eye bordered below by gray-brown line. Grayish-white underparts. Black and tawny streaks on back. Black wing feathers with wide tawny edges. White patch on wing. Yellow bill. Immature males lack full throat patch of adults.

#### **3. Blue Rock Pigeon: *Columba livia***

**Order:** Columbiformes  
**Family:** Columbidae

- Size: 32-34 cm    Wingspan: 66-70 cm    Weight: 270-350 gm
- The Rock Pigeon has grayish head, iridescent green and purple on neck and throat, light gray back and belly

- Pale gray wings with two dark wing bars, dark gray primaries, white rump patch, and medium squared light gray tail with black terminal band.
- Bill is dark gray and legs pink.

**4. Rose ringed parakeet: *Psittacula krameri* Order: Psittaciformes**

**Family: Psittacidae**

- Size: 42 cm
- A parrot with generally green plumage. Yellowish under wing and lower abdomen. Long bluish-green tail, tipped with yellow.
- Sharp, deeply hooked red beak. Pale yellow eyes. Green-grey legs.
- **Male:** Black across chin and lower cheek. Rose-pink collar.
- **Female:** No black on chin and cheeks. No rose-pink collar. Shorter tail than male.
- **Juveniles:** Similar to female. Coral-pink beak. Grey-white eyes. Grey legs.

**Rodents:** There are two types of rodents viz., commensal rodents and field rodents

Commensal Rodents

**Class:** Mammalia.

**1. House mouse: *Mus musculus***

**Sub order:** Myomorpha.

**Order:** Rodentia.

**Family:** Muridae.

- House mice are gray or brownish grey dorsally and whitish to light grey ventrally.
- Relatively large ears and small eyes.
- An adult weighs about 1/2 ounce and is about 8-22 cm long, including the 3 to 4 inch tail.
- Fur is fine, smooth, short without spines.

**2. House rat: *Rattus rattus***

- Adult weighs 150-250 g.
- Tail longer than the body, uniformly coloured and scaly.
- Rings on tail well marked.
- Ears large, prominent without hairs.
- Pointed snout.
- Dark bronish colour on dorsal side.

**3. Common Indian field mouse: *Mus musculus booduga***

- 5-8 cm long
- Tail is 5 cm
- Brown in colour with white belly

#### 4. Brown rat/ Norway rat: *Rattus norvegicus*

- 35-41 cm length, blunt snout
- Brownish above with white belly

#### Field Rodents

##### 1. ~~Soft furred field rat/~~ Grass rat: *Millardia melitana*

- Small, slender, 100g wt. moderate to poorly haired.
- Length 28-43 cm
- Tail shorter or equal to head & body

##### 2. Lesser bandicoot : *Bandicota bengalensis*

- Tail is 118-20 cm, less than or equal to body and head put together. Tail scaly, 160-170 rings.
- Snout short, stumpy, fur thick, harsh, spines present, brown/reddish above
- Adult 325g, length 36-48 cm

#### Crabs:

**Rice field crab: *Paratelphusa hydrodromus* Class: Decapoda**

**Order: Crustacea**

- Has an oval body with an abdomen tucked beneath the thoracic region.

#### Giant African snail – *Achatina fulica*

**Phylum: Mollusca**

**Class: Gastropoda**

**Order: Eupulmonata**

**Family: Achatinidae**

The fully grown GAS consists of 7 to 9 (very exceptionally 10) whorls, with a moderately swollen body-whorl and a sharply conical spire, which is distinctly narrowed but scarcely drawn out at the apex.

- The snail can reach up to 20 cm in length and up to 12 cm in diameter. The outlines vary from very slender to moderately obese, the broader specimens tending to be shorter for the same number of whorls.
- All whorls are decidedly convex due to the broadly impressed sutures. The aperture is relatively short, even in the broadest specimens, being always shorter than the spire.
- The outer lip is usually sharp and thin, rarely somewhat thickened or even slightly expanded in very old specimens; it is convex, evenly curved into a regular semi-ellipse, and inserted on the body-whorl at a sharp, open angle, the upper part of the body-whorl being scarcely or not flattened behind the lip

#### Record Work

1. Observe the various non-insect pests and draw neat labeled diagrams.