

Crop Protection Reviewer

By Agriculture Review

- 1. Which type of insect mouthpart is primarily adapted for piercing plant tissues and sucking out fluids (common in aphids and leafhoppers)?**
 - A) Sponging
 - B) Piercing-sucking
 - C) Chewing
 - D) Siphoning

- 2. The larval stage of which insect pest causes “deadheart” symptoms in rice during the early growth stage?**
 - A) Rice stem borer (*Scirpophaga incertulas*)
 - B) Rice bug (*Leptocorisa oratorius*)
 - C) Brown planthopper (*Nilaparvata lugens*)
 - D) Rice thrips (*Stenchaetothrips biformis*)

- 3. The pathogen *Xanthomonas oryzae* pv. *oryzae* causes which of the following major diseases in rice?**
 - A) Sheath blight
 - B) Bacterial leaf blight
 - C) Rice tungro
 - D) Leaf spot

- 4. Which of the following insecticides belongs to the neonicotinoid chemical group?**
 - A) Malathion
 - B) Carbaryl
 - C) Imidacloprid
 - D) Cypermethrin

- 5. The concept of “Economic Threshold Level (ETL)” in pest management refers to:**
- A) Pest population density at which control measures should be applied to prevent reaching economic injury
 - B) Lowest pest density causing visible symptoms
 - C) Pest density causing unavoidable yield loss
 - D) Level of pest population tolerated without damage
- 6. Which fungus is responsible for the “downy mildew” disease of corn commonly found in tropical regions?**
- A) *Peronosclerospora sorghi*
 - B) *Fusarium moniliforme*
 - C) *Helminthosporium maydis*
 - D) *Rhizoctonia solani*
- 7. “Trichogramma” is widely used in biological control programs as it parasitizes which stage of insect pests?**
- A) Larva
 - B) Egg
 - C) Pupa
 - D) Adult
- 8. Which of the following weeds is most problematic in irrigated rice fields and known as “barnyard grass”?**
- A) *Cyperus rotundus*
 - B) *Echinochloa crus-galli*
 - C) *Amaranthus* sp.
 - D) *Imperata cylindrica*
- 9. The disease “Panama wilt” in banana is caused by which of the following pathogens?**
- A) *Fusarium oxysporum* f. sp. *cubense*
 - B) *Colletotrichum musae*
 - C) *Mycosphaerella fijiensis*
 - D) *Pseudomonas solanacearum*

10. Which herbicide is widely used as a post-emergence, non-selective systemic herbicide that inhibits EPSP synthase enzyme in weeds?

- A) Paraquat
- B) Glyphosate
- C) Atrazine
- D) 2,4-D

11. The “hopperburn” symptom observed in rice is caused by the feeding of which insect pest?

- A) Rice stem borer
- B) Rice bug
- C) Brown planthopper
- D) Green leafhopper

12. Which of the following fungal diseases is characterized by “white, powdery growth” on leaf surfaces and commonly affects mango, cucumber, and rose plants?

- A) Anthracnose
- B) Powdery mildew
- C) Downy mildew
- D) Leaf spot

13. The insect order “Coleoptera” can be identified by which distinct feature?

- A) Two pairs of membranous wings
- B) Hardened forewings called elytra
- C) One pair of halteres for balance
- D) Scaled wings with proboscis

14. Which of the following pathogens is transmitted by the green leafhopper in rice?

- A) Bacterial leaf streak
- B) Sheath blight
- C) Tungro virus
- D) False smut

15. Which of the following statements best describes “systemic fungicides”?

- A) They remain on the surface and prevent spore germination
- B) They kill beneficial soil microorganisms
- C) They are absorbed and translocated within the plant tissues
- D) They are used only in seed treatment

16. In IPM programs, which of the following is considered a cultural control method?

- A) Crop rotation and planting resistant varieties
- B) Use of pheromone traps
- C) Release of parasitoids
- D) Spraying chemical insecticides

17. The weed *Cyperus rotundus* is particularly difficult to control because it reproduces mainly through which structure?

- A) Seeds
- B) Stolons
- C) Tubers
- D) Rhizomes

18. “Late blight” of potato and tomato is caused by which pathogen?

- A) *Alternaria solani*
- B) *Phytophthora infestans*
- C) *Fusarium oxysporum*
- D) *Pseudomonas syringae*

19. Which class of insecticides inhibits acetylcholinesterase enzyme, leading to accumulation of acetylcholine in synapses?

- A) Pyrethroids
- B) Neonicotinoids
- C) Organophosphates
- D) Insect growth regulators

20. Which biological agent is effective against soil-borne fungal pathogens such as *Rhizoctonia* and *Pythium* in vegetable crops?

- A) *Bacillus thuringiensis*
- B) *Trichoderma harzianum*
- C) *Paecilomyces lilacinus*
- D) *Beauveria bassiana*

21. The “dead heart” symptom in rice is caused by which insect during the vegetative stage?

- A) Rice gall midge
- B) Rice stem borer
- C) Rice bug
- D) Brown planthopper

22. The disease “Sigatoka leaf spot” in banana is caused by which pathogen?

- A) *Mycosphaerella musicola*
- B) *Colletotrichum musae*
- C) *Fusarium oxysporum* f. sp. cubense
- D) *Alternaria alternata*

23. The biological control agent *Bacillus thuringiensis* (Bt) is most effective against which group of insects?

- A) Lepidopteran larvae
- B) Aphids and jassids
- C) Beetles
- D) Termites

24. In weed management, “pre-emergence herbicide” is applied at which time?

- A) After weeds have emerged
- B) Before weed seeds germinate but after sowing the crop
- C) During flowering stage of the crop
- D) After crop harvest

25. “Khaira disease” in rice is caused due to deficiency of which micronutrient?

- A) Iron (Fe)
- B) Manganese (Mn)
- C) Zinc (Zn)
- D) Copper (Cu)

26. “Stem rust” of wheat is caused by which fungus?

- A) *Puccinia graminis* f. sp. *tritici*
- B) *Puccinia recondita*
- C) *Puccinia striiformis*
- D) *Helminthosporium oryzae*

27. Which among the following insect pests is a vector of “banana bunchy top virus”?

- A) Aphid (*Pentalonia nigronervosa*)
- B) Mealybug
- C) Whitefly
- D) Thrips

28. The insect growth regulators (IGRs) primarily act by interfering with which physiological process of insects?

- A) Digestion
- B) Molting and metamorphosis
- C) Feeding behavior
- D) Water absorption

29. The term “mycoplasma-like organisms” (MLOs) is now officially referred to as:

- A) Phytoplasmas
- B) Rickettsia
- C) Viroids
- D) Bacteriophages

30. Which of the following nematodes causes “root-knot” disease in vegetables such as tomato and brinjal?

- A) *Heterodera avenae*
- B) *Radopholus similis*
- C) *Meloidogyne incognita*
- D) *Tylenchulus semipenetrans*

31. The “hopperburn” symptom in rice is caused by the feeding damage of which insect pest?

- A) Brown planthopper (*Nilaparvata lugens*)
- B) Rice bug (*Leptocorisa oratorius*)
- C) Rice leaf folder
- D) Green leafhopper

32. “Tungro disease” in rice is transmitted by which insect vector?

- A) Brown planthopper
- B) Green leafhopper
- C) Rice bug
- D) White-backed planthopper

33. “Ergot disease” of pearl millet is caused by which fungus?

- A) *Claviceps fusiformis*
- B) *Ustilago tritici*
- C) *Alternaria alternata*
- D) *Fusarium oxysporum*

34. The scientific name of the cotton bollworm is:

- A) *Helicoverpa armigera*
- B) *Spodoptera litura*
- C) *Earias vittella*
- D) *Pectinophora gossypiella*

35. “Loose smut” of wheat can be effectively controlled by which method?

- A) Seed treatment with systemic fungicides
- B) Soil drenching
- C) Foliar spray during heading
- D) Field sanitation only

36. The bacterium *Xanthomonas oryzae* pv. *oryzae* causes which disease in rice?

- A) Sheath blight
- B) Bacterial leaf blight
- C) Brown spot
- D) Blast

37. Which pesticide formulation contains both an emulsifier and an oil-based active ingredient?

- A) WP (Wettable Powder)
- B) EC (Emulsifiable Concentrate)
- C) GR (Granule)
- D) DS (Dustable Powder)

38. The term “economic threshold level” (ETL) refers to:

- A) Pest density at which control measures should be initiated to prevent economic loss
- B) Pest population at which damage is visible
- C) Minimum pest density for biological control
- D) Maximum level of pesticide residue in food

39. The “club root” disease in cruciferous crops is caused by which pathogen?

- A) *Plasmodiophora brassicae*
- B) *Alternaria brassicae*
- C) *Rhizoctonia solani*
- D) *Pythium debaryanum*

40. Which of the following insect orders includes the largest number of plant pest species?

- A) Lepidoptera
- B) Coleoptera
- C) Hemiptera
- D) Diptera

41. “Red rot” disease of sugarcane is caused by which fungal pathogen?

- A) *Colletotrichum falcatum*
- B) *Ustilago scitaminea*
- C) *Fusarium sacchari*
- D) *Cercospora sacchari*

42. The insect pest “white grub” belongs to which insect order?

- A) Diptera
- B) Coleoptera
- C) Lepidoptera
- D) Hemiptera

43. Which of the following weeds is a common host for rice grassy stunt virus?

- A) Echinochloa crus-galli
- B) Cyperus rotundus
- C) Commelina benghalensis
- D) Parthenium hysterophorus

44. “Angular leaf spot” of cotton is caused by which bacterium?

- A) Xanthomonas citri
- B) Xanthomonas campestris pv. malvacearum
- C) Pseudomonas syringae
- D) Erwinia carotovora

45. The major vector of “leaf curl virus” in tomato is:

- A) Whitefly (Bemisia tabaci)
- B) Aphid
- C) Thrips
- D) Jassid

46. “Late blight” of potato and tomato is caused by which pathogen?

- A) Phytophthora infestans
- B) Alternaria solani
- C) Fusarium oxysporum
- D) Pythium debaryanum

47. Which of the following is a biological control agent against mealybugs in mango orchards?

- A) Cryptolaemus montrouzieri
- B) Trichogramma chilonis
- C) Bracon hebetor
- D) Chrysoperla carnea

48. “Panama wilt” disease of banana is caused by which pathogen?

- A) *Fusarium oxysporum* f. sp. *cubense*
- B) *Colletotrichum musae*
- C) *Alternaria alternata*
- D) *Pythium aphanidermatum*

49. Which stage of the insect life cycle is targeted by ovicidal insecticides?

- A) Egg
- B) Larva
- C) Pupa
- D) Adult

50. The mode of action of organophosphate insecticides is primarily through inhibition of which enzyme?

- A) Amylase
- B) Cholinesterase
- C) Protease
- D) Oxidase

Answer Key

1. B	14. C	27. A	40. B
2. A	15. C	28. B	41. A
3. B	16. A	29. A	42. B
4. C	17. C	30. C	43. A
5. A	18. B	31. A	44. B
6. A	19. C	32. B	45. A
7. B	20. B	33. A	46. A
8. B	21. B	34. A	47. A
9. A	22. A	35. A	48. A
10. B	23. A	36. B	49. A
11. C	24. B	37. B	50. B
12. B	25. C	38. A	
13. B	26. A	39. A	