

Crop Protection Reviewer By Agriculture Review

1. Which of the following is considered a biotrophic pathogen?

- a. *Fusarium oxysporum*
- b. *Pythium aphanidermatum*
- c. *Puccinia graminis*
- d. *Sclerotinia sclerotiorum*

2. Which part of the disease triangle can be controlled by planting resistant varieties?

- a. Environment
- b. Pathogen
- c. Host
- d. All of the above

3. The rice disease known as “tungro” is caused by:

- a. Fungi
- b. Bacteria
- c. Virus
- d. Nematodes

4. Which fungal structure is commonly responsible for initiating new infections?

- a. Sclerotia
- b. Chlamydospores
- c. Conidia
- d. Mycelia

5. Which symptom is associated with vascular wilt diseases?

- a. Leaf curling
- b. Chlorosis
- c. Internal discoloration of stem
- d. Leaf spot

6. What is the primary vector of Rice Tungro Bacilliform Virus?

- a. Leaf folder
- b. Green leafhopper
- c. Brown planthopper
- d. Gall midge

7. Which pathogen causes bacterial leaf blight in rice?

- a. *Xanthomonas oryzae* pv. *oryzae*
- b. *Pseudomonas fluorescens*
- c. *Rhizoctonia solani*
- d. *Ustilago maydis*

8. Which group of fungi produces aflatoxins?

- a. *Penicillium* spp.
- b. *Aspergillus* spp.
- c. *Alternaria* spp.
- d. *Fusarium* spp.

9. Powdery mildew differs from downy mildew by:

- a. Requiring higher humidity
- b. Having spores on the upper leaf surface
- c. Having no visible symptoms
- d. Producing oospores

10. Which of the following is a postharvest fungal disease?

- a. Club root
- b. Citrus canker
- c. Anthracnose
- d. Corn smut

11. What is the causal organism of rice sheath blight?

- a. *Rhizoctonia solani*
- b. *Magnaporthe oryzae*
- c. *Fusarium moniliforme*
- d. *Ustilagoidea virens*

12. Which nematode is associated with root-knot symptoms?

- a. Heterodera spp.
- b. Meloidogyne spp.
- c. Globodera spp.
- d. Pratylenchus spp.

13. Which of the following diseases is caused by a virus in tomatoes?

- a. Fusarium wilt
- b. Bacterial wilt
- c. Tomato mosaic
- d. Early blight

14. The resting structure of Plasmodiophora brassicae is called:

- a. Cyst
- b. Zoospore
- c. Sporangium
- d. Resting spore

15. Bacterial ooze is a diagnostic sign of:

- a. Fusarium wilt
- b. Bacterial wilt
- c. Leaf blight
- d. Late blight

16. In the hypersensitive response, infected plant cells:

- a. Multiply rapidly
- b. Become dormant
- c. Die quickly to limit pathogen spread
- d. Release toxins

17. Which among the following is a seed-borne pathogen in rice?

- a. Rhizoctonia solani
- b. Xanthomonas oryzae
- c. Pyricularia oryzae
- d. Cercospora oryzae

18. What is the scientific name of the causal agent of corn smut?

- a. Ustilago maydis
- b. Puccinia sorghi
- c. Cercospora zeae-maydis
- d. Diplodia maydis

19. Virulence refers to:

- a. The capacity to spread
- b. The ability to evade host defenses
- c. The degree of pathogenicity
- d. The ability to survive without a host

20. The term "blight" is best defined as:

- a. Lesions on stems
- b. A sudden, complete, and extensive death of plant tissues
- c. Fungal growth on leaves
- d. Plant galls

21. Which insect pest is known as the "dead heart" causing pest in rice during early growth?

- a. Rice bug
- b. Brown planthopper
- c. Yellow stem borer
- d. Leaf folder

22. Which stage of the rice bug (Leptocorisa oratorius) causes the most economic damage?

- a. Egg
- b. Nymph
- c. Adult
- d. Pupa

23. What is the most common mode of feeding of aphids?

- a. Chewing
- b. Rasping
- c. Piercing and sucking
- d. Biting

24. The scientific name of the brown planthopper is:

- a. Nilaparvata lugens
- b. Nezara viridula
- c. Leptocorisa acuta
- d. Dicladispa armigera

25. Which insect pest is known to cause “hopper burn” in rice fields?

- a. Green leafhopper
- b. Yellow stem borer
- c. Brown planthopper
- d. Rice hispa

26. The rice hispa (Dicladispa armigera) primarily damages which part of the plant?

- a. Grain
- b. Leaf
- c. Stem
- d. Root

27. Which insect pest is a vector of rice grassy stunt virus?

- a. Green leafhopper
- b. Brown planthopper
- c. Rice hispa
- d. Yellow stem borer

28. In which crop is the shoot and fruit borer (Leucinodes orbonalis) a major pest?

- a. Tomato
- b. Brinjal
- c. Chili
- d. Okra

29. Which chewing insect pest causes damage to corn by boring into its ears?

- a. Corn leaf aphid
- b. Corn earworm
- c. Green leafhopper
- d. Rice hispa

30. Which insect pest commonly causes white patches on rice leaves due to feeding?

- a. Brown planthopper
- b. Rice hispa
- c. Stem borer
- d. Gall midge

31. What is the most damaging insect pest of stored corn in the Philippines?

- a. *Sitophilus oryzae*
- b. *Tribolium castaneum*
- c. *Sitophilus zeamais*
- d. *Rhyzopertha dominica*

32. The fruit fly species that infests mangoes in the Philippines is:

- a. *Bactrocera dorsalis*
- b. *Dacus cucurbitae*
- c. *Ceratitis capitata*
- d. *Anastrepha ludens*

33. Which pest causes “hopper burn” in mango seedlings?

- a. Mango twig borer
- b. Mango leafhopper
- c. Mango fruit fly
- d. Mango mealybug

34. What is the recommended management strategy for corn borer (*Ostrinia furnacalis*)?

- a. Use of *Trichogramma*
- b. Application of herbicide
- c. Bagging of fruits
- d. Handpicking of eggs

35. Which insect pest causes wilting in young tomato plants?

- a. Leaf miner
- b. Cutworm
- c. Fruit borer
- d. Aphids

36. In vegetables, the diamondback moth is a major pest of:

- a. Solanaceous crops
- b. Cucurbits
- c. Brassicas
- d. Legumes

37. What is the damage symptom of banana weevil borer?

- a. Wilting of leaves and plant collapse
- b. Leaf curling
- c. Fruit spotting
- d. Fruit cracking

38. Which of the following weeds is parasitic in nature?

- a. Cyperus rotundus
- b. Amaranthus spinosus
- c. Striga asiatica
- d. Echinochloa crus-galli

39. Which herbicide is used for selective control in transplanted rice?

- a. Glyphosate
- b. Butachlor
- c. Paraquat
- d. Atrazine

40. "False seedbed" technique is used to control:

- a. Insects
- b. Nematodes
- c. Weeds
- d. Soil erosion

41. Which of the following is a pre-emergence herbicide commonly used in maize?

- a. 2,4-D
- b. Pendimethalin
- c. Paraquat
- d. Glyphosate

42. Which weed commonly infests sugarcane fields and is difficult to control?

- a. *Cyperus rotundus*
- b. *Amaranthus viridis*
- c. *Digitaria sanguinalis*
- d. *Echinochloa crus-galli*

43. Which of the following is an example of a biological control agent used against aphids?

- a. Ladybird beetle
- b. Spider mite
- c. Grasshopper
- d. Thrips

44. What is the mode of action of pyrethroid insecticides?

- a. Disruption of photosynthesis
- b. Inhibition of acetylcholinesterase
- c. Disruption of sodium channels
- d. Inhibition of respiration

45. What is the recommended method to manage weed infestation in upland vegetables?

- a. Pre-emergence herbicide only
- b. Manual weeding only
- c. Integrated weed management
- d. Crop rotation only

46. Which type of pesticide formulation is most prone to drift during application?

- a. Granules
- b. Emulsifiable concentrate
- c. Wettable powder
- d. Aqueous spray

47. Which biological control agent is used to manage the coconut scale insect?

- a. *Trichogramma* spp.
- b. *Aphytis lingnanensis*
- c. *Bracon hebetor*
- d. *Metarhizium anisopliae*

48. Which equipment is ideal for applying herbicides in row crops?

- a. Rotary duster
- b. Knapsack sprayer
- c. Mist blower
- d. Ultra low volume sprayer

49. Which of the following is a contact herbicide?

- a. Butachlor
- b. Paraquat
- c. Pendimethalin
- d. Atrazine

50. What does “economic threshold level” (ETL) refer to in pest management?

- a. The cost of control exceeds the damage
- b. Pest population must be completely eradicated
- c. Pest population reaches a level where control action is needed
- d. Threshold where yield loss cannot be avoided

51. What pathogen causes rice blast disease?

- a. Xanthomonas oryzae
- b. Rhizoctonia solani
- c. Pyricularia oryzae
- d. Pseudomonas syringae

52. Panama disease in banana is caused by:

- a. Fusarium oxysporum f.sp. lycopersici
- b. Phytophthora infestans
- c. Fusarium oxysporum f.sp. cubense
- d. Cercospora musae

53. The most common bacterial disease in tomato is:

- a. Late blight
- b. Fusarium wilt
- c. Bacterial wilt
- d. Damping-off

54. Mango anthracnose is caused by which pathogen?

- a. *Fusarium oxysporum*
- b. *Alternaria solani*
- c. *Colletotrichum gloeosporioides*
- d. *Xanthomonas campestris*

55. What symptom is characteristic of corn downy mildew?

- a. Leaf spot
- b. Leaf shredding
- c. Root rot
- d. Blighted tassels

56. Rice tungro virus is transmitted by:

- a. Planthopper
- b. Green leafhopper
- c. Aphid
- d. Thrips

57. The disease cycle of late blight in potato involves:

- a. Seed-to-seed spread
- b. Soil-borne spores only
- c. Infected tubers and air-borne spores
- d. Insect vectors

58. What is the best cultural control for damping-off in seedlings?

- a. Deep planting
- b. Proper drainage and seed treatment
- c. Flood irrigation
- d. Using shade nets

59. What type of pathogen causes club root in crucifers?

- a. Bacterium
- b. Virus
- c. Fungus-like protist
- d. Nematode

60. Which of the following diseases is soil-borne?

- a. Rice tungro
- b. Citrus canker
- c. Fusarium wilt
- d. Anthracnose

61. Root-knot nematodes belong to which genus?

- a. Heterodera
- b. Meloidogyne
- c. Pratylenchus
- d. Ditylenchus

62. What is a typical symptom of root-knot nematode infestation in vegetables?

- a. Leaf blight
- b. Yellow stripes on leaves
- c. Gall formation on roots
- d. Wilted panicles

63. Which crop is a known host of the cereal cyst nematode (*Heterodera avenae*)?

- a. Tomato
- b. Maize
- c. Wheat
- d. Sugarcane

64. Which rodent species is a common pest in Philippine rice fields?

- a. *Bandicota bengalensis*
- b. *Rattus tanezumi*
- c. *Mus musculus*
- d. *Rattus norvegicus*

65. Which of the following is used as a rodenticide bait?

- a. Zinc phosphide
- b. Imidacloprid
- c. Sulfosulfuron
- d. Dimethoate

66. Which of the following practices is NOT part of Integrated Pest Management?

- a. Cultural control
- b. Chemical control
- c. Monocropping
- d. Mechanical control

67. What is the first step in implementing IPM in a farm?

- a. Chemical spraying
- b. Pest identification and monitoring
- c. Soil sterilization
- d. Use of resistant varieties

68. Which of the following is an example of cultural pest control?

- a. Crop rotation
- b. Insecticide use
- c. Use of parasitoids
- d. Use of traps

69. *Trichoderma harzianum* is commonly used in IPM as a:

- a. Fungicide
- b. Mycofungal antagonist
- c. Rodenticide
- d. Nematicide

70. Which concept is emphasized in IPM?

- a. Complete pest eradication
- b. Continuous pesticide use
- c. Economic injury level
- d. Total crop destruction

71. Which color code is used for the most toxic pesticide formulations in the Philippines?

- a. Red
- b. Blue
- c. Green
- d. Yellow

72. Which of the following PPE (Personal Protective Equipment) is essential when applying liquid pesticides?

- a. Cotton gloves
- b. Rubber gloves
- c. Open sandals
- d. Straw hat

73. What is the function of a surfactant in a pesticide spray solution?

- a. Reduce evaporation
- b. Improve spreading and sticking of spray on leaves
- c. Decrease toxicity
- d. Neutralize residues

74. Which pesticide formulation is most suitable for indoor residual spraying?

- a. Emulsifiable concentrate
- b. Dust
- c. Wettable powder
- d. Aerosol

75. What should be the first action in case of accidental pesticide poisoning?

- a. Induce vomiting immediately
- b. Drink plenty of water
- c. Take a cold shower
- d. Call a physician or poison control center

76. In pest forecasting, the term "ETL" stands for:

- a. Economic Threshold Level
- b. Estimated Tolerance Limit
- c. Ecological Threat Level
- d. Environmental Toxic Load

77. Which tool is most commonly used in pest surveillance programs?

- a. Tensiometer
- b. Pheromone trap
- c. Soil auger
- d. Lysimeter

78. Light traps are mainly effective for monitoring which type of pest?

- a. Aphids
- b. Whiteflies
- c. Nocturnal moths
- d. Termites

79. Degree-day models are used in pest forecasting to:

- a. Measure rainfall
- b. Estimate pest development stages based on temperature
- c. Predict pesticide degradation
- d. Estimate economic damage

80. Which of the following is a preventive approach in pest surveillance?

- a. Reactive pesticide spraying
- b. Monitoring pest population trends
- c. Collecting yield data
- d. Crop rotation

81. Under the Philippine Fertilizer and Pesticide Authority (FPA), what is the minimum training required to become a licensed pesticide applicator?

- a. Basic Applicator Training
- b. IPM Technician Course
- c. Extension Agent Certification
- d. Crop Protection Internship

82. Which Republic Act governs pesticide regulation and control in the Philippines?

- a. RA 8435
- b. RA 10068
- c. PD 1144
- d. RA 9275

83. Which government agency is primarily responsible for pesticide registration in the Philippines?

- a. DA-BAR
- b. FPA
- c. BPI
- d. DENR

84. Which of the following best defines a "restricted use pesticide"?

- a. A pesticide with limited market availability
- b. A pesticide approved only for ornamental crops
- c. A pesticide that can be applied only during rainy season
- d. A pesticide that requires trained personnel due to high toxicity or environmental risk

85. What is the maximum residue limit (MRL) primarily intended to ensure?

- a. Crop yield maximization
- b. Food safety for consumers
- c. Insect resistance control
- d. Fertilizer dosage

86. Which practice best prevents pesticide resistance development?

- a. Repeated use of same chemical group
- b. Spraying higher doses than recommended
- c. Rotation of different mode-of-action pesticides
- d. Continuous spraying regardless of need

87. Which of the following is a systemic fungicide?

- a. Propiconazole
- b. Mancozeb
- c. Sulfur
- d. Copper oxychloride

88. Which pest surveillance technique uses recorded climate and pest population data for predictions?

- a. Light trapping
- b. Forecast modeling
- c. Visual scouting
- d. Yellow sticky traps

89. "Baculovirus" is used primarily for the biocontrol of:

- a. Aphids
- b. Whiteflies
- c. Caterpillars (Lepidopteran larvae)
- d. Mites

90. What is the major purpose of the Economic Injury Level (EIL) in pest management?

- a. Determine harvest time
- b. Avoid unnecessary pesticide applications
- c. Promote crop growth
- d. Identify seed quality

91. A farmer applies a neonicotinoid insecticide on a flowering crop. Which non-target organism is most at risk?

- a. Earthworms
- b. Bees
- c. Rodents
- d. Birds

92. Which of the following is an example of a biorational pesticide?

- a. Glyphosate
- b. *Bacillus thuringiensis* (Bt)
- c. Chlorpyrifos
- d. Paraquat

93. Which pest management approach focuses on combining biological, cultural, and chemical tools with minimal environmental risk?

- a. Organic farming
- b. High-input agriculture
- c. Integrated Pest Management
- d. Zero-tillage cultivation

94. Which of the following is a contact insecticide with fast knockdown effect?

- a. Imidacloprid
- b. Malathion
- c. Chlorantraniliprole
- d. Pyrethrin

95. What is the first line of defense in preventing crop diseases?

- a. Fungicide application
- b. Use of resistant varieties
- c. Sanitation
- d. Crop rotation

96. Which class of herbicides inhibits photosynthesis by blocking photosystem II?

- a. Triazines
- b. Aryloxyphenoxypropionates
- c. Dinitroanilines
- d. Glycines

97. Which mycotoxin is produced by *Aspergillus flavus* in stored corn?

- a. Fumonisin
- b. Aflatoxin
- c. Ochratoxin
- d. Deoxynivalenol

98. In fungicide resistance management, what is the FRAC code used for?

- a. Classifying herbicides by crop safety
- b. Identifying insecticide persistence
- c. Grouping fungicides by mode of action
- d. Estimating residue levels

99. Which entomopathogenic fungus is widely used to control whiteflies and aphids?

- a. *Beauveria bassiana*
- b. *Bacillus subtilis*
- c. *Metarhizium anisopliae*
- d. *Gliocladium virens*

100. The primary goal of Integrated Disease Management (IDM) is to:

- a. Eliminate all disease-causing agents
- b. Minimize disease impact using compatible tools
- c. Depend solely on chemical control
- d. Promote natural disasters to reduce pests

Answer Key

1. C	21. C	41. B	61. B	81. A
2. C	22. C	42. A	62. C	82. C
3. C	23. C	43. A	63. C	83. B
4. C	24. A	44. C	64. B	84. D
5. C	25. C	45. C	65. A	85. B
6. B	26. B	46. D	66. C	86. C
7. A	27. B	47. B	67. B	87. A
8. B	28. B	48. B	68. A	88. B
9. B	29. B	49. B	69. B	89. C
10. C	30. B	50. C	70. C	90. B
11. A	31. C	51. C	71. A	91. B
12. B	32. A	52. C	72. B	92. B
13. C	33. B	53. C	73. B	93. C
14. D	34. A	54. C	74. C	94. D
15. B	35. B	55. B	75. D	95. B
16. C	36. C	56. B	76. A	96. A
17. C	37. A	57. C	77. B	97. B
18. A	38. C	58. B	78. C	98. C
19. C	39. B	59. C	79. B	99. A
20. B	40. C	60. C	80. B	100. B