

CROP SCIENCE REVIEWER

By Agriculture Review

1. Which of the following rice varieties is known for its aromatic grains?

- A. IR64
- B. Jasmine
- C. NSIC Rc222
- D. PSB Rc14

2. The optimal spacing for hybrid maize planting is usually:

- A. 20 cm x 20 cm
- B. 40 cm x 75 cm
- C. 10 cm x 50 cm
- D. 50 cm x 50 cm

3. Which nutrient deficiency in rice is characterized by yellowing of leaves starting from the tip?

- A. Phosphorus
- B. Potassium
- C. Nitrogen
- D. Calcium

4. Which method is commonly used for sugarcane propagation?

- A. Seed sowing
- B. Stem cuttings (setts)
- C. Layering
- D. Grafting

5. The main pest of sweet potato that bores into the tuber is:

- A. Whitefly
- B. Sweet potato weevil
- C. Aphid
- D. Leaf miner

6. Which pruning type is used to remove dead or diseased branches in fruit trees?

- A. Thinning
- B. Heading back
- C. Rejuvenation pruning
- D. Sanitation pruning

7. Which fruit crop is primarily propagated by budding in the Philippines?

- A. Banana
- B. Mango
- C. Citrus
- D. Pineapple

8. In tomato cultivation, the ideal row spacing is:

- A. 30-40 cm
- B. 50-60 cm
- C. 75-100 cm
- D. 10-20 cm

9. Which method is commonly used for propagation of ornamental plants?

- A. Layering
- B. Grafting
- C. Cuttings
- D. All of the above

10. Which disease in rice is caused by a fungus?

- A. Bacterial leaf blight
- B. Rice tungro
- C. Rice blast
- D. Leaf streak virus

11. Mass selection is a breeding method suitable for which type of crops?

- A. Self-pollinated crops
- B. Cross-pollinated crops
- C. Both
- D. None

12. Hybrid vigor or heterosis refers to:

- A. Reduced fertility in hybrids
- B. Superior performance of hybrids over parents
- C. Increased mutation rate
- D. Genetic uniformity

13. Which type of breeding method is used to develop pure lines in self-pollinated crops?

- A. Pedigree selection
- B. Mass selection
- C. Recurrent selection
- D. Synthetic breeding

14. Cassava mosaic virus is primarily transmitted by:

- A. Whiteflies
- B. Aphids
- C. Stem cuttings
- D. Soil nematodes

15. Which is a major insect pest of corn in the Philippines?

- A. Rice stem borer
- B. Fall armyworm
- C. Sweet potato weevil
- D. Mango hopper

16. The main pest of rice that causes hopperburn is:

- A. Rice stem borer
- B. Brown planthopper
- C. Leaf folder
- D. Gall midge

17. Which micronutrient deficiency in rice leads to yellow-orange leaf tips?

- A. Zinc
- B. Boron
- C. Copper
- D. Iron

18. Alternate wetting and drying (AWD) is a water management practice primarily used in:

- A. Sugarcane
- B. Rice
- C. Maize
- D. Cassava

19. Which vegetative propagation method is commonly used for pineapple?

- A. Suckers
- B. Stem cuttings
- C. Layering
- D. Grafting

20. Which of the following is a fungal disease of sweet potato?

- A. Sweet potato weevil
- B. Scurf
- C. Leaf miner
- D. Aphid infestation

21. Which Philippine organization regulates variety release and seed certification?

- A. NSIC
- B. DA-RFO
- C. PCA
- D. PhilRice

22. Pedigree selection is a breeding method suitable for:

- A. Cross-pollinated crops
- B. Self-pollinated crops
- C. Both
- D. None

23. Which of the following is a viral disease affecting rice?

- A. Sheath blight
- B. Rice tungro
- C. Blast
- D. Brown spot

24. The main propagation method for cassava is:

- A. Stem cuttings
- B. Seeds
- C. Tissue culture
- D. Layering

25. Which insect pest is a major problem in mango orchards?

- A. Mango hopper
- B. Fall armyworm
- C. Whitefly
- D. Leaf miner

26. The type of pruning used to stimulate flowering in ornamentals is called:

- A. Sanitation pruning
- B. Rejuvenation pruning
- C. Heading back
- D. Thinning

27. Which method is used to induce mutations in plant breeding?

- A. Radiation
- B. Chemical mutagens
- C. Both A and B
- D. Cross-pollination

28. Which is a common bacterial disease of rice?

- A. Rice tungro
- B. Bacterial leaf blight
- C. Rice blast
- D. Leaf spot

29. Which fertilizer is a primary source of phosphorus for crops?

- A. Urea
- B. DAP (Diammonium phosphate)
- C. Potash
- D. Ammonium sulfate

30. Which nutrient deficiency in maize causes interveinal chlorosis on younger leaves?

- A. Nitrogen
- B. Iron
- C. Potassium
- D. Magnesium

31. Which major disease affects citrus fruits in the Philippines?

- A. Citrus canker
- B. Powdery mildew
- C. Leaf spot
- D. Downy mildew

32. Which fruit crop is propagated using suckers in the Philippines?

- A. Banana
- B. Mango
- C. Citrus
- D. Pineapple

33. Which method is used to control brown planthopper in rice?

- A. Biological control with spiders
- B. Use of resistant varieties
- C. Proper water management
- D. All of the above

34. Which method is commonly used to propagate mango?

- A. Grafting
- B. Seed sowing
- C. Layering
- D. Cutting

35. Which maize disease is caused by a virus transmitted by leafhoppers?

- A. Downy mildew
- B. Maize streak virus
- C. Leaf blight
- D. Smut

36. Which of the following is used to assess seed viability?

- A. Tetrazolium test
- B. pH test
- C. Fertilizer analysis
- D. Germination test only

37. Which nutrient deficiency in rice causes stunted growth with dark green leaves?

- A. Nitrogen
- B. Phosphorus
- C. Potassium
- D. Zinc

38. Which method is used to produce disease-free planting materials in cassava?

- A. Tissue culture
- B. Seed sowing
- C. Stem cutting from diseased plants
- D. Layering

39. Which plant breeding method is commonly used to develop synthetic varieties?

- A. Pure line selection
- B. Mass selection
- C. Hybridization
- D. Pedigree selection

40. Which major disease affects banana crops in the Philippines?

- A. Panama disease (Fusarium wilt)
- B. Rice blast
- C. Downy mildew
- D. Citrus canker

41. Which nutrient is most mobile in soil and leaches easily in tropical regions?

- A. Nitrogen
- B. Phosphorus
- C. Potassium
- D. Calcium

42. Which propagation method is used in citrus orchards to maintain uniformity?

- A. Seed propagation
- B. Grafting
- C. Layering
- D. Tissue culture

43. Which pest is commonly controlled by introducing Trichogramma wasps?

- A. Fall armyworm
- B. Rice stem borer
- C. Mango hopper
- D. Whitefly

44. Which of the following is a major pest in tomato crops?

- A. Aphids
- B. Leaf folder
- C. Brown planthopper
- D. Sugarcane borer

45. Which disease affects the leaves of sweet potato causing brown spots?

- A. Leaf spot
- B. Scurf
- C. Root rot
- D. Mosaic virus

46. Which vegetative propagation method involves rooting of a branch while still attached to the parent plant?

- A. Cutting
- B. Layering
- C. Grafting
- D. Budding

47. Which maize nutrient deficiency causes interveinal chlorosis in older leaves?

- A. Nitrogen
- B. Magnesium
- C. Phosphorus
- D. Zinc

48. Which disease affects mango fruits causing black spots and rotting?

- A. Anthracnose
- B. Powdery mildew
- C. Citrus canker
- D. Leaf blight

49. Which type of hybrid in crops is produced by crossing two inbred lines?

- A. Three-way hybrid
- B. Single cross hybrid
- C. Double cross hybrid
- D. Synthetic hybrid

50. Which soil nutrient deficiency leads to poor root development in rice?

- A. Nitrogen
- B. Phosphorus
- C. Potassium
- D. Calcium

Answer Key

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|--------------------------------|------------------------------------|
| 1. B - Jasmine | 26. C - Heading back |
| 2. B - 40 cm x 75 cm | 27. C - Both A and B |
| 3. C - Nitrogen | 28. B - Bacterial leaf blight |
| 4. B - Stem cuttings (setts) | 29. B - DAP (Diammonium phosphate) |
| 5. B - Sweet potato weevil | 30. B - Iron |
| 6. D - Sanitation pruning | 31. A - Citrus canker |
| 7. C - Citrus | 32. A - Banana |
| 8. C - 75-100 cm | 33. D - All of the above |
| 9. D - All of the above | 34. A - Grafting |
| 10. C - Rice blast | 35. B - Maize streak virus |
| 11. B - Cross-pollinated crops | 36. A - Tetrazolium test |
| | 37. B - Phosphorus |

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12. B - Superior performance of hybrids over parents
13. A - Pedigree selection
14. A - Whiteflies
15. B - Fall armyworm
16. B - Brown planthopper
17. A - Zinc
18. B - Rice
19. A - Suckers
20. B - Scurf
21. A - NSIC
22. B - Self-pollinated crops
23. B - Rice tungro
24. A - Stem cuttings
25. A - Mango hopper
38. A - Tissue culture
39. B - Mass selection
40. A - Panama disease (Fusarium wilt)
41. A - Nitrogen
42. B - Grafting
43. B - Rice stem borer
44. A - Aphids
45. A - Leaf spot
46. B - Layering
47. B - Magnesium
48. A - Anthracnose
49. B - Single cross hybrid
50. B - Phosphorus