

CALIFORNIA STATE UNIVERSITY, FRESNO
Department of Plant Science, Jordan College of Agriculture Science & Technology
and
The FFA Field Day Committee

65th ANNUAL COTTON JUDGING CONTEST (A&B teams)

November 5, 2022

WRITTEN EXAMINATION

All answers must be indicated on the accompanying **SCANTRON ANSWER SHEET by completely blocking out the one correct answer using a No. 2 lead pencil.** All questions pertain to cotton grown in the **San Joaquin Valley (SJV) unless otherwise stated.**

I. TRUE-FALSE: Indicate whether the statement is true or false by **blocking out the correct answer. Fill in 'A' if the statement is true or 'B' for false.**

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1. Cotton plants with short stature, small and light green leaves are caused due to Potassium deficiency.
 2. Excessive vegetative growth, reduced defoliation, large leaves, rank plants and delayed boll maturity can be caused due to excessive nitrogen fertilization.
 3. Dead plants in circles about 20-60 feet wide, irrespective of crop rows, can be caused due to lightning damage.
 4. Alfalfa strips are recommended to be planted in cotton fields to manage Lygus populations.
 5. Soil salinity level of 9.6 ds/m or higher has no negative impact on cotton yield.
 6. Organic manures provide larger quantity of Nitrogen compared to chemical fertilizer.
 7. When cotton is planted on raised beds, it is recommended to place a band of Ammonical fertilizer within 5 inches from the seed row.
 8. The plough down date for south of Fresno is Dec 20th.
 9. Cotton emergence is complete within 5-15 days after planting.
 10. Soil temperature below 55⁰ F will cause chilling injury to cotton seedlings.
 11. A soil temperature of 65⁰ F is minimum requirement for quick germination and emergence.
 12. Cotton roots can grow to a depth of 6 feet or more.
 13. Using systemic insecticides as seed treatments is best for overall integrated pest management.
 14. Trifluralin, Pendimethalin are post-emergent cotton herbicides.
 15. In soils favoring tall and vigorous plants, a population of 60,000 plants per acre is ideal.
 16. The recommended moisture level for ginning cotton is 6-8 %.
 17. Last day of cotton planting should be around April 15.
 18. A germination percentage total of cool and warm germ above 150 is a good seed quality trait.
 19. Cotton growth peaks at a tissue temperature of 86⁰ F.

20. A GDD forecast of 16-20 units in the days after cotton planting is ideal for stand establishment.
21. If grown under warm, frost-free conditions, cotton plants will stop growing after harvest.
22. Urea has the highest analysis among Nitrogen containing fertilizers.
23. Large, oval to irregular tan to reddish brown lesions on cotton hypocotyl are caused by Pythium.
24. Cotton is an indeterminate plant.
25. Premature aging of leaves, color change from green to speckled yellow and red is caused due to ozone toxicity.
26. Nitrogen deficiency symptoms first appear on new leaves of cotton.
27. Average monthly water use for cotton crop is similar in months of July and August.
28. Paraquat, endothall, and cacodylic acid are used as defoliant in cotton harvest management.
29. Tight seed cap can be avoided by using a seed applied fungicide.
30. Late summer bronzing, scorching of upper leaves, and thick leathery leaves are caused due to Potassium deficiency.

II. MULTIPLE CHOICE: Block out the letter for answer to each question.

31. The optimum date for completing preirrigation on a field with sandy loam soil is:
 - a. Feb. 15
 - b. Feb. 25
 - c. March 1
 - d. March 15
32. Candelabra plant or crazy cotton is caused due to:
 - a. Nitrogen deficiency
 - b. grasshoppers
 - c. spidermites
 - d. Lygus
33. The first flowering branch of pima cottons typically occurs on which main stem node?
 - a. 14 - 15th node
 - b. 12 - 13th node
 - c. 10 - 11th node
 - d. 6 - 9th node
34. "Cut-out" as measured by NAWF is caused by:
 - a. irrigation cut-off
 - b. late season high temperatures
 - c. pest pressure
 - d. physiological stress from developing bolls
35. Which transgenic cotton trait has reduced the most pesticide used on cotton grown around the world?
 - a. Sulfonylurea (SU)
 - b. Bromoxynil (BXN)
 - c. Insect resistance (Bt)
 - d. Glyphosate (Roundup)
36. To get a seeding density of 35000 plants per acre, how many seeds need to be planted per foot of row when cotton is grown on 30" rows?
 - a. 1
 - b. 1.5
 - c. 2
 - d. 2.5
37. In the northern edge of SJV, _____ GDDs are available for cotton during the growing season:
 - a. 2500
 - b. 3300
 - c. 3100
 - d. 3000

