Cotton Questions

Land Preparation

Soils analyzed by the Texas A&M lab provides you with the amount of each nutrient in parts per million. To convert to pounds per acre multiply the parts per million by 2.

15. How much nitrogen and phosphorous will need to be applied to produce a 500 pound bale of cotton? To meet the need of the cotton crop, 60 pounds of nitrogen and 20 to 40 pounds of phosphorus needs to be applied per bale of cotton produced.

16. When should each macro nutrient be applied? Will soil texture make a difference?
Soil texture would certainly impact this. In sandy soils only half of the nitrogen will need to be applied prior to planting or early in the cotton plants development. The rest of the nitrogen would be applied prior to the one-third grown square stage. In soils that have a high percentage of clay, all of the nitrogen can be applied prior to planting. Phosphorus can be applied prior to planting in both soil types and needs to be placed 6 to 8 inches deep where it can be taken up by the plant root. If potassium is needed, in sandy soil only half of the potassium would be applied prior to planting and the rest applied prior to the one-third grown square stage.

17. What are furrow dikes used for? Furrow dikes are used to retain water in place across the field. If the furrow dikes are correctly built more than 95 percent of the rain will stay in the field compared to less than 75 percent of the water being retained in an undiked field.

18. When should your PPI herbicides be applied and to what depth? PPI herbicides need to be applied prior to the germination of the susceptible weed. The herbicide controls weed in the upper inch of soil. The PPI herbicide should not be incorporated below that depth.

19. What impact will a PPI herbicide have on a cotton plant if it is incorporated too deep? If the PPI herbicide is placed below the depth of the cottonseed the developing lateral roots on the cotton plant will stop their growth if they expand into an area that is protected by the herbicide. The lateral roots won't develop off of the tap root until it gets below the herbicide band. In some cases the cotton may grow slowly for several weeks.

Insect Questions

20. Thrips cause most of their problems when
    d. Cotton growth is slowed due to cool temperatures.

21. Thrips damage is characterized by
    c. Leaf edges silvering and curling upwards

22. Cotton fleahoppers are
    c. A problem from pinhead squares to first bloom

23. Integrated Pest Management (IPM)
    a. Requires an understanding of both crop and pest biologies

24. Bollworm moths can be distinguished from tobacco budworm moths by
    d. The presence of three to four light colored bands on the budworm moth

25. Bollworm/tobacco budworm eggs can be distinguished from cabbage looper eggs by
    b. The rounded appearance of the bollworm/budworm egg

26. Control of bollworm/tobacco budworms is best achieved when
    c. First and second instar larvae are present

27. Bollworm/tobacco budworm damage is characterized by
    b. Holes in the squares and bolls and presence of webbed or brown frass

28. Bollworm/tobacco budworm economic thresholds change as the season progresses.

29. Control of overwintered boll weevils occurs
    d. When cotton reaches the first match-head size square

30. Boll weevils have
    b. Chewing mouthparts

31. Aphids in cotton can be distinguished from other insects by
    a. The presence of cornicles

32. Aphid infestations can be accurately sampled by
    c. Counting aphids on the first fully expanded leaf and a leaf in the middle of the plant

33. Aphids cause damage by
    b. Sucking plant juices and reducing carbohydrates to squares and bolls

34. Natural enemies do have an effect on treatment decisions.

35. It is false to say that any insect in cotton that is not a pest is a beneficial.

36. A predator is an insect that requires multiple hosts to complete development.

37. Beet armyworm damage is characterized by
    c. Holes in the squares and boll and skeletonizing of bracts and leaves

38. Pink bollworm damage is characterized by
    d. Rosetted blooms and no obvious boll damage until bolls are cut open

39. Proper clothing for field scouting to limit pesticide exposure consists of
    b. Long pants, long sleeved shirt, socks and shoes

40. Hand washing with soap is the most important method of limiting pesticide exposure for field scouts