

Questions and Answers on SUBTERRANEAN TERMITES

f 1. Termite management specialists must be knowledgeable in:

- a. Building construction
- b. Termite biology and behavior
- c. Proper and safe use of chemicals
- d. Use and maintenance of equipment
- e. Safety
- f. All of the above

b 2. Termites belong to the Order:

- a. Coleoptera
- b. Blattodea (previously belonged to Isoptera)
- c. Hymenoptera
- d. Siphonaptera

a 3. The Order of termites is the only Order that is entirely made-up of social insects.

- a. True
- b. False

c 4. Termites are closely related to primitive:

- a. Ants
- b. Beetles
- c. Cockroaches
- d. Silverfish

a 5. Termites harbor one-celled organisms in their digestive tracts, and these organisms convert cellulose of wood into substances that termites can digest.

- a. True
- b. False

a 6. Termites are considered beneficial in nature, as they help convert dead wood and organic materials containing cellulose to humus.

- a. True
- b. False

a 7. Termites have a division of labor amongst the different types of individuals. They have a _____ system.

- a. Caste
- b. Complete
- c. Incomplete
- d. Gradual

- e 8. Which stages of subterranean termites of the family Rhinotermitidae perform all the work of the colony and are the forms that do all the damage to structures?
- a. Nymphs
 - b. Workers
 - c. Soldiers
 - d. Reproductives
 - e. Nymphs and workers
 - f. Workers and soldiers
- b 9. Workers only perform one duty – food gathering (damaging wood).
- a. True
 - b. False
- a 10. Soldiers only perform one duty – defense of the colony.
- a. True
 - b. False
- a 11. Workers and soldiers are eyeless and therefore are blind.
- a. True
 - b. False
- d 12. Winged adult termites are referred to as:
- a. Swarmers
 - b. Alates
 - c. Primary reproductives
 - d. All of the above
- b 13. Subterranean termites of the genus *Reticulitermes* swarm most commonly during:
- a. Winter
 - b. Spring
 - c. Summer
 - d. Fall
- d 14. Secondary reproductives: -
- a. Lack eyes and wings
 - b. Lack eyes and have wings
 - c. Have eyes and wings
 - d. Have eyes and wing buds
- c 15. _____ are the most numerous individuals in the subterranean termite colony.
- a. Swarmers
 - b. Soldiers
 - c. Workers
 - d. Secondary reproductives

b 16. Termites develop by _____ metamorphosis.

- a. No
- b. Gradual
- c. Incomplete
- d. Complete

c 17. In newly formed colonies, the first batch of eggs usually all become _____.

- a. Swarmers
- b. Soldiers
- c. Workers
- d. Secondary reproductives

b 18. Workers are usually dark-colored and do not have any wings.

- a. True
- b. False

b 19. _____ have large heads and have much larger mandibles than other forms.

- a. Swarmers
- b. Soldiers
- c. Workers
- d. Secondary reproductives

a 20. Tertiary reproductives:

- a. Lack eyes and wings
- b. Lack eyes and have wings
- c. Have eyes and wings
- d. Have eyes and wing buds

a 21. Which is seen more by homeowners?

- a. Swarmers
- b. Soldiers
- c. Workers
- d. Secondary reproductives

b 22. *Reticulitermes flavipes* (the eastern subterranean termite) swarmers are:

- a. Light in color
- b. Dark in color

b 23. Subterranean termites have:

- a. Two wings of equal size and shape
- b. Two pair of wings of equal size and shape
- c. One pair of wings of equal size and shape
- d. No wings

b 24. Eastern subterranean termites generally swarm:

- a. Early morning
- b. Around noon
- c. In the mid-afternoon
- d. In the evening when it is dark

d 25. Formosan subterranean termites generally swarm:

- a. Early morning
- b. Around noon when it is lightest
- c. In the mid-afternoon
- d. In the evening when it is dark

a 26. Swarmer subterranean termites are attracted to light.

- a. True
- b. False

a 27. Homeowners often confuse swarming termites with flying ants.

- a. True
- b. False

b 28. Termites have a thin waist while ants have a thick waist.

- a. True
- b. False

a 29. Ants have elbowed antennae while termites have straight (bead-like) antennae.

- a. True
- b. False

b 30. Worker termites have eyes while worker ants do not have eyes.

- a. True
- b. False

a 31. It usually takes only a few months for functional workers to develop.

- a. True
- b. False

b 32. It usually takes only a few months for swarmer termites to develop.

- a. True
- b. False

- b 33. After a subterranean termite colony becomes established, the primary reproductives are responsible for producing most of the eggs within the colony.
- a. True
 - b. False
- a 34. Temperature, light conditions, moisture, and barometric pressure all may influence swarming.
- a. True
 - b. False
- a 35. Moisture is critical to subterranean termite survival.
- a. True
 - b. False
- a 36. Subterranean termites normally maintain contact with the soil unless there is an above-ground moisture source.
- a. True
 - b. False
- b 37. Subterranean termites generally prefer a clay soil over a sandy soil.
- a. True
 - b. False
- a 38. Subterranean termites have fecal material in their nest which often promotes the growth of microorganisms such as fungi that serve as nourishment.
- a. True
 - b. False
- b 39. In the fall, subterranean termites respond to the rapid decrease in soil temperature by moving upward in the soil.
- a. True
 - b. False
- d 40. Mud tubes of subterranean termites serve to:
- a. Conceal the termites
 - b. Provide termites a moist environment
 - c. Protect the termites from their enemies
 - d. All the above
- a 41. Mud tubes of subterranean termites are made-up of fecal material, soil particles, and saliva.
- a. True
 - b. False

- a 42. Which type of termites do the most amount of damage to structures in the U.S.?
- a. Subterranean termites
 - b. Drywood termites
- b 43. Which type of swarmer subterranean termite is the largest?
- a. *Reticulitermes flavipes* (Eastern subterranean termite)
 - b. *Coptotermes formosanus* (Formosan subterranean termite)
- b 44. Which type of termite does the most amount of damage to any one structure?
- a. *Reticulitermes flavipes* (Eastern subterranean termite)
 - b. *Coptotermes formosanus* (Formosan subterranean termite)
- b 45. Subterranean termites can eat concrete.
- a. True
 - b. False
- c 46. Subterranean termites can gain entrance through a crack as small as:
- a. 1/2"
 - b. 1/10"
 - c. 1/32"
 - d. 1/100"
- b 47. Formosan subterranean termites generally swarm in Georgia:
- a. From mid-March through April
 - b. From mid-May through June
 - c. From mid-July through September
 - d. From mid-October through December
- d 48. Subterranean termites can eat:
- a. Wood
 - b. Cardboard
 - c. Paper
 - d. All of the above
- c 49. Subterranean termites cannot damage:
- a. sheet rock walls
 - b. wood flooring
 - c. most hard metals
 - d. rubber baseboard
 - e. rubber liners of swimming pools
 - f. c, d, & e

- b 50. The eastern subterranean termite prefers white oak and Douglas fir to Loblolly pine and slash pine.
- a. True
 - b. False
- a 51. The Formosan subterranean termite prefers sugar maple to Loblolly pine and slash pine.
- a. True
 - b. False
- b 52. The subterranean termite prefers to feed on non-decayed over decayed wood.
- a. True
 - b. False
- b 53. The eastern subterranean termite eats approximately _____ of its body weight each day.
- a. 1% to 2%
 - b. 2% to 3%
 - c. 5% to 10%
 - d. Over 10%
- b 54. The eastern subterranean termite is more aggressive than the Formosan subterranean termite.
- a. True
 - b. False
- f 55. Subterranean termites can communicate with each other by:
- a. Trail pheromones
 - b. Alarm pheromones
 - c. Colony specific pheromones
 - d. Sound
 - e. Trophallaxis
 - f. All of the above
 - g. None of the above
- a 56. Worker subterranean termites forage continuously for new sources of food.
- a. True
 - b. False
- b 57. _____ and _____ produce chemicals that may regulate the proportion of castes in the colony and are spread to other colony members by trophallaxis.
- a. Workers and soldiers
 - b. Soldiers and reproductives

d 58. Which subterranean termite is often associated with carton?

- a. Eastern subterranean termite
- b. Southeastern subterranean termite
- c. Light southeastern subterranean termite
- d. Formosan subterranean termite

b 59. Formosan subterranean termites are found in Florida, Louisiana, and Hawaii, but are not found in Georgia.

- a. True
- b. False

b 60. Eastern subterranean termites have many small hairs on its wings, while Formosan subterranean termites do not have small hairs on its wings.

- a. True
- b. False

b 61. Subterranean termites have 3 or more dark veins at the front of their wings.

- a. True
- b. False

a 62. Subterranean termites prefer spring wood to summer wood.

- a. True
- b. False

a 63. Subterranean termites feed:

- a. Along the grain of wood
- b. Across the grain of wood

a 64. The soil treatment is the principal method used to control subterranean termites in the United States today.

- a. True
- b. False

b 65. Imidichloprid (Premise) and Fipronil (Termidor) are both repellent termiticides. They repel subterranean termites from the treated soil and causing little mortality.

- a. True
- b. False

b 66. Cypermethrin (Demon TC) and Permethrin (Prelude) are both non-repellent termiticides.

- a. True
- b. False

- b 67. Either trenching or rodding soil that is adjacent to the exterior foundation wall meets the minimum subterranean termite treatment standards in GA.
- a. True
 - b. False
- a 68. Trenching must be performed at least 6" deep and need not be greater than 6' wide. Trenching must be performed to the footer or a minimum of 4 feet deep along the foundation walls, whichever comes first.
- a. True
 - b. False
- c 69. The rate of application of a termiticide to a trench along a foundation wall with the footer one foot below grade is:
- a. 2 gallons/10 linear feet
 - b. 3 gallons/10 linear feet
 - c. 4 gallons/10 linear feet
 - d. 5 gallons/10 linear feet
- b 70. In Georgia, you cannot mix termiticide at a concentration greater than recommended on the label, but you can mix termiticide at a concentration less than recommended on the label.
- a. True
 - b. False
- a 71. The rate of application of a termiticide to a void in a foundation wall or pier is:
- a. 2 gallons/10 linear feet
 - b. 3 gallons/10 linear feet
 - c. 4 gallons/10 linear feet
 - d. 5 gallons/10 linear feet
- b 72. The rate of application of a termiticide to clay soil to be covered by a slab on a pre-construction treatment is:
- a. 1 gallon /10 linear feet
 - b. 1 gallon/10 square feet
 - c. 1 ½ gallons/10 linear feet
 - d. 1 ½ gallons/10 square feet
 - e. 2 gallons/10 square feet
- d 73. The rate of application of a termiticide to rock or coarse gravel to be covered by a slab on a pre-construction treatment is:
- a. 1 gallon/10 linear feet
 - b. 1 gallon/10 square feet
 - c. 1 ½ gallons/10 linear feet
 - d. 1 ½ gallons/10 square feet
 - e. 2 gallons/10 square feet

- b 74. Termite shields generally prevent subterranean termites from attacking wood in crawlspace structures.
- a. True
 - b. False
- c 75. Slabs that are adjacent to the exterior foundation wall of a structure must be drilled within _____ of where the slab meets the foundation wall and at no greater than _____ intervals along the expansion joint.
- a. 6", 6"
 - b. 6", 12"
 - c. 12", 12"
 - d. 12", 18"
- b 76. Voids of hollow elements such as hollow block or brick veneer walls must be drilled and treated:
- a. At no greater than 8" intervals along the wall
 - b. At no greater than 12" intervals along the wall
 - c. At no greater than 16" intervals along the wall
 - d. At no greater than 18" intervals along the wall
- c 77. The voids of hollow block exterior foundation walls must be drilled and treated:
- a. Within 12" of the lower of the soil or slab level on either side of the wall
 - b. Within 16" of the lower of the soil or slab level on either side of the wall
 - c. Within 18" of the lower of the soil or slab level on either side of the wall
 - d. Within 12" of the exterior soil level
- a 78. Physical barriers such as stainless steel mesh, sand barriers, and plastic sheeting that is impregnated with toxic or repellent insecticides are methods that are occasionally used in California to prevent or to manage subterranean termites during pre-construction.
- a. True
 - b. False
- a 79. Calibration of termite treating equipment is necessary to deliver the proper amount of termiticide to treatment sites.
- a. True
 - b. False
- b 80. Borate treatments of wood are a good substitute for good construction practices, the chemical treatment of soil, and mechanical alteration.
- a. True
 - b. False

- a 81. A foam application is a useful tool for treating difficult to reach areas with liquid formulations (cavities or voids, or on the bottom of a slab of a dirt-filled porch).
- a. True
 - b. False
- b 82. A subterranean termite colony has only one nest.
- a. True
 - b. False
- f 83. Termites probably evolved:
- a. About 1,000 years ago
 - b. About 10,000 years ago
 - c. About 100,000 years ago
 - d. About 1,000,000 years ago
 - e. About 10,000,000 years ago
 - f. Over 100,000, 000 years ago
- b 84. When termites shed their skin during molting, they lose the compliment of the intestinal protozoans in their hind gut. In order to be able to digest wood, the newly molted termites must practice:
- a. Trophallaxis
 - b. Proctodeal feeding
 - c. Phototropism
 - d. Thigmotaxis
- d 85. How would you characterize a termite swarm flight? Termites...
- a. Fly a long distance and fly strongly
 - b. Fly a short distance and fly strongly
 - c. Fly a long distance and fly weakly
 - d. Fly a short distance and fly weakly
- c 86. How does a female swarmer termite attract a male swarmer termite?
- a. It rubs its wings and makes a sound to attract the male.
 - b. It makes a chirping sound with its mouthparts to attract the male.
 - c. It releases a pheromone that attracts the male.
 - d. It uses a cell phone.
- a 87. About ____ of the population of the eastern subterranean termite colony is made up of soldiers.
- a. 2%
 - b. 5%
 - c. 10%
 - d. 20%

- b 88. About ____ of the population of the Formosan subterranean termite colony is made up of soldiers.
- a. 3% to 10%
 - b. 10% to 20%
 - c. 50%
- a 89. It is important to use _____ pressure when treating for subterranean termites.
- a. Low
 - b. High
- d 90. For subterranean termite treatments, there must be at least _____ clearance between wood and soil in the crawlspace unless the wood is treated for ground contact.
- a. 6"
 - b. 12"
 - c. 16"
 - d. 18"
- a 91. There must be at least _____ clearance between wood and soil on the outside of the structure being treated for subterranean termites unless the wood is treated for ground contact.
- a. 6"
 - b. 12"
 - c. 16"
 - d. 18"
- a 92. With a vapor barrier covering 90% of the soil in a 2,500 sq. ft crawlspace, how many standard vents (8"x16") would be needed to provide adequate ventilation for a PPB treatment?
- a. 2
 - b. 8
 - c. 10
 - d. 12
- d 93. With a vapor barrier covering 70% of the soil in a 1,500 sq. ft. crawlspace, how many standard vents (8"x16") would be needed to provide adequate ventilation for a PPB treatment in crawl?
- a. 2
 - b. 8
 - c. 10
 - d. 12

- b 94. Subterranean termite treatments may not be made, under any circumstance, at "Schools" when children or students are present on school property.
- a. True
 - b. False
- b 95. Post construction subterranean termite soil treatments may not be made within 100 feet of a well in GA.
- a. True
 - b. False
- b 96. If an active subterranean termite infestation is found in a structure within 90 days of the inspection and issuance of the Official Wood Infestation Inspection Report, the structure must receive a complete treatment, free-of-charge, even if the structure was treated within the past year.
- a. True
 - b. False
- a 97. Termiticides may not be applied while precipitation is occurring in any area where the application may be affected by the precipitation.
- a. True
 - b. False
- c 98. With all preconstruction subterranean termite treatments, the final application must be made within _____ days after the earlier of the granting of the local certificate of occupancy, the actual occupancy of the structure by the tenant, owner, or otherwise, the closing of the permanent loan on the property, or the completion of backfilling by the building contractor or owner.
- a. 30 days
 - b. 60 days
 - c. 90 days
 - d. 120 days
- d 99. All termite baits and termite baiting systems shall be monitored consistent with the product's label and labeling directions for a minimum period of one year at no additional cost to the homeowner when installed:
- a. for each post construction subterranean termite baiting system job
 - b. for each pre-construction subterranean termite baiting system job
 - c. for each treatment to control a subterranean termite infestation found during the coverage period of an Official Wood Infestation Inspection Report
 - d. for b & c
- b 100. When documenting pesticide use for subterranean termite treatments at "Schools", it is not necessary to document start and completion times, noting AM or PM.
- a. True
 - b. False