ORNAMENTAL AND TURF PLANT PEST AND WEED CONTROL
Practice Questions

INSTRUCTIONS: Have a highlighter and a colored pen handy. As you study through the text, look for the answers to the following questions and mark them in the book or on the sheet provided. Also, as you study through the text, ask yourself, "If I know this information will I be a better applicator?" If you answer "YES" that information would also be a good question for the test. Make a note of it. In order to allow for quick grading, most questions on the test are in the form of Multiple Choice or True and False; but this is not necessarily so.

PLANT PEST CONTROL (pages 1 - 24)

1. What is a sucking insect?

2. List examples of sucking insects. Pg. 1

3. Note the best time for insecticide applications to control the various insect pests.

4. How do aphids compare to most other insects in reproductive potential.

5. When given, note how long the life cycle of the listed insects is.

6. Name the type of pesticide that should best control aphids.

7. Define insecticide.

8. Define systemic insecticide.

9. Define larvacide.

10. Define miticide.

11. Describe the type of weather preferred by Chinch bugs. Pg. 2

12. Name an insect that gives off a vile odor when crushed.

13. Name an insect that can be controlled with dormant oil.

14. When is dormant oil used to control scale on trees and woody shrubs.

15. Where do you expect to find spider mites on plants?

16. At what stage can a miticide be applied.

17. Give a non-chemical treatment that can be helpful in controlling spider mites.

18. Name the grass where ground pearl is a most commonly a problem. Pg. 5

19. What is a chewing insect?

20. List examples of chewing insect. Pg. 5

21. How can white grub damaged to lawn grass be recognized?

22. How many white grubs per square foot are required to cause economic damage to lawn grasses.

23. Give another name for the adult stage of a white grub. Pg. 6

24. List something unusual that female June beetles tend to do when laying their eggs.

25. When are control measures for white grubs most effective?

26. Describe the weather conditions that best fosters an increases in the fall armyworm populations.

27. When do fall armyworms feed on young and succulent plant foliage? Pg. 7

28. What affect would a killing frost have on fall armyworm larvae.

29. What affect does temperature have on fall armyworm pupal stage.

30. Where does the walnut caterpillar moth deposits it's eggs. Pg. 8

31. Name a distinguishing characteristic of the adult stage of twig girdler beetles. As a result what are the adult beetles called? Pg. 9

32. Describe bagworms.

33. When are chemical measures to control bagworms most effective?

34. What is a leaf miner? Pg. 11

35. Is a leafminer a mature or an immature form of insect?

36. Name some plants that are particularly susceptible to attack by leafminers.

37. Where do fall webworms constructs their webs. Pg. 12

Plant Diseases start page on page 15

38. Name the kind of organism that causes black spot on rose. Pg. 15

39. Describe how you might recognize powdery mildew.

40. Name a plant that is highly susceptible to powdery mildew.

41. Name the boat shaped segmented spore produced by ***Alternaria***. Pg. 16

42. Name the kind of organism that causes leaf gall on azaleas.

43. Describe the effect that leaf gall has on leaves.

43. Name the kind of organism that causes crown gall of rose.

44. Tell what must be done to any plant infected with crown gall.

45. Name the most common plant parasitic nematode. Pg. 17

46. Is it possible to eradicate nematodes completely from the soil with conventional means once a soil becomes infested with them.

47. Describe the typical symptom of root knot nematodes on ornamental plants.

48. Describe the typical symptom of a leaf spot infection on fruitless mulberry plants.

49. Describe the typical symptom of oak leaf blister on water oak.

50. Define fungicide.

51. When must a fungicide be applied to be effective in controlling oak leaf blister?

52. Describe the weather conditions that encourage lichen growth. Pg. 18

53. Name two types of "organisms" that grow together to form lichens on the trunk of a tree.

54. Define epiphytic-type plant.

55. Give an example of an epiphytic-type plant common on live oak.

56. What is ball moss?

57. Name the kind of organism that causes brown patch in a lawn. Pg. 19

58. What lawn grass is most commonly attacked by brown patch?

59. Does brown patch occur on other lawn grasses?

60. Describe the weather conditions that encourage brown patch.

61. When should applications of a fungicide be made for chemical control of brown patch to be

achieved?

62. Name the kind of organism that causes St. Augustine decline in a lawn. Pg. 19

63. Give the meaning of SAD.

64. Name the nutrient deficiency effect that is sometimes confused with the symptoms of St. Augustine decline.

65. Compare the symptoms of St. Augustine decline to the symptoms of iron chlorosis.

66. How is St. Augustine decline spread?

67. Can SAD be controlled with chemicals?

68. Define a resistant variety.

69. Name a grass variety that is resistant to St. Augustine decline.

70. What is thatch?

71. Name the lawn grass where it is commonly found.

72. What age of lawn is most commonly affected?

73. Name the kind of organism that causes Bermuda grass smut in a lawn.

74. Name the kind of organism that causes fairy ring in a lawn.

75. How are mushrooms and fairy rings related?

76. Should you eat the mushrooms that come up in your lawn?

GREENHOUSE is a different Category and is not included in the Ornamental and Turf Category.

WEED CONTROL (pages 40-49)
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CAUTION: sowthistle is listed on page 40 line 4 as an example of a warm season annual - that sentence is quoted on the test as examples of warm season annuals. We all see sowthistle emerge in late fall flower in spring and die off in late spring or early summer typical of a COOL season annual. The test reflects the *book* **Not** what is correct. Don't let this mix you up just expect it and go on. If they took sowthistle out of that sentence it would be OK, the other three examples are indeed warm season annuals.

Example question:

Crabgrass, goosegrass, *sowthistle,* and prostrate spurge germinate and emerge from late winter through the summer. These weeds are considered _____. **Pg. 40**

A. cool season annuals
B. cool season perennials
C. warm season annuals
D. warm season perennials

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77. Define annual. Give examples.

78. Define biennial. Give examples.

79. Define perennial. Give examples.

80. Name the annual grass is a problem in newly seeded turf and in heavy traffic areas in the summer months

81. Name another grass with a branched seedhead similar to goosegrass.

82. Name an annual broadleaf weed that emerges in midwinter, has a yellow flower, and the seedhead has a feathery gray appearance at maturity.

83. Name an annual broadleaf weed that has small, oblong leaves arranged opposite each other along a purplish stem.

84. Name an annual broadleaf weed that produces a milky juice in it's stems.

85. Name the most common cool season annual "grassy" weed in Texas.

86. Name a weed that emerges in midwinter or early spring and usually occurs in patches or as single plants and can be very unattractive in dormant bermuda grass turf.

(Hint to consider: they may copy statements directly from the text that may actually be true of other plants but that is not what the copied sentence in the text says. I believe this statement could be as true for chickweed and henbit (both cool season annuals) as it is for rescuegrass. The question above would be more clear if it said "grassy" weed. There may be such unclear questions when a direct quote is lifted from the text.)

87. Name a weed with profusely branched stems, opposite leaves and multiple small white flowers.

88. Name a common broadleaved winter weed that has a square stem and clasping, scalloped leaves with purple flowers.

89. What type of plants live at least two years and possibly indefinitely?

90. Name a low growing perennial that emerges primarily from seeds in midwinter to early spring and has a yellow flower. Pg. 41 (Don't choose dandelion here)

91. Give another names for oxalis.

92. Give an example of a cool season perennial.

93. Name a perennial weed that arises from both seeds and short rhizomes and has a seed that appears as small, round disks arranged along a branched spike. (Should say "grassy")

94. Name the weed that is the most difficult to control in turf and ornamentals.

95. Name the best known weed in Texas which arises primarily from seed, although the topgrowth will regenerate from the taproot after mowing or chopping. Pg. 44

96. Name a slender upright perennial weed produces both seeds and aerial bulblets.

Selecting chemical control methods - - -

97. Define herbicide.

98. Selecting the _____ herbicide for a specific weed problem is the key to effective control of weeds without injury to desired plants.

99. Before selecting a specific herbicide, the applicator of a herbicide should carefully read and study the _____ .

100. List the conditions required to control weed seed, tubers and rhizomes in the soil with a soil fumigant. Pg. 44

101. A soil should be tilled to a depth of 6 inches and moist when applying a _____ .

102. Define preemergence.

103. What term is used for herbicides that are applied before emergence of weeds. Pg. 45

104. Define postemergence.

105. Define contact.

106. Describe the affect of high rainfall on the likelihood of injury from preemergence herbicides due to leaching of chemicals into the root zone of desirable plants.

107. What is organic matter?

108. Soil texture refers to the relative quantities of sand, silt and clay. (True or False)

109. Name the most important soil factors affecting herbicide rates and movement. Pg. 45

110. Name the soil particle type that has the fewest sites on which organic molecules can be held.

111. Name the soil type that herbicides are least likely to leach through.

112. Name the soil type that herbicides are most likely to leach through.

113. Sand is the soil texture least likely "tie-up" herbicides. (True or False)

114. List three factors that affect the leachability of a given herbicide. Pg. 46

115. Name a herbicide that is often used in "weed and feed" formulations.

116. Preemergence herbicide rates increase as sand content increases. (True or False)

117. Which is easier, 1) to use a preemergence herbicide or 2) to wait until a weed problem exists and then try to eliminate it?

118. Which is more likely to move into the root system and cause injury to trees 1) a soil sterilant or 2) a postemergence contact herbicide? Pg. 48

119. What affect does surface hairs and a waxy cuticle have on absorption of the spray solution?

120. What affect does humidity have on herbicide uptake by the plant?

121. What is the affect of adding a surfactant or a wetting agent to most postemergence herbicides?

122. How can leaf absorption be enhanced?

123. Define nonselective herbicide.

124. Define selective herbicide.

125. Define a growth regulator.

126. What is cacodylic acid.

127. Define a hormone-type herbicide.

128. List three examples of hormone-type herbicides.

129. Drift control is most important when using which type of herbicide?

130. List two difficulties encountered when using a spinner-type applicator to apply herbicide-impregnated fertilizers

131. Name the type of chemical used to reduce the rate of growth in ornamentals and turf when one wants to decrease the labor requirement for mowing and trimming.

SOIL FUMIGATION (page 51 - 55) is a separate Category and is covered on a different Exam.

There is a separate worksheet for Label Practice.

Work the Calibration Practice Set for Calibration.

Weed Review

Weed	Monocot grass/sedge	Dicot Broadleaf	Annual Perennial	Cool season Warm season	
purple nutsedge	X		P	W	
yellow nutsedge	X		P	W	
sedge (misc.	X		A/P	W/C	
rescuegrass	X		A	C	
bluegrass, annual	X		A	C	
goosegrass	X		A	W	
crabgrass	X		A	W	
bermudagrass	X		P	W	
johnsongrass	X		P	W	
dallisgrass	X		P	W	
wild garlic	X		P	C	
wild onion	X		P	C	
chickweed		X	A	C	
henbit		X	A	C	
sow thistle		X	A	C	
spurge		X	A	W	
oxalis		X	P	W	
dandelion		X	P	C/W	

Insect pests	Sucking or Chewing	general size	Plant Species & Plant part attacked	length and type of life cycle	Noval characteristics (like odor)
walnut caterpillar					
Loopers					
Twig girdlers					
White grubs June beetle					
Fall armyworms					
Elm leaf beetle					
Cottonwood borer					
Cutworm					
sod webworms					
Nematodes					
Bagworm					
ground pearls					
Chinch bug					
Aphids plant lice					
thrips					
Spider mites					
Chinch bugs					
scale					
Spider mites					