## Truman's Scientific - Chapter 6 - COCKROACHES

e, cockroaches are known to have been present on earth for nearly
species of cockroach worldwide!.
species of cockroach are found in the United States.
from various points in their bodies that can
tions are high, these secretions may result in a characteristic e general region of the infestation.
nisms, such as have been found on cockroach bodies.
gents

7) Different forms of cockroaches.	ар	pears to	be the principle d	isease(s) spread by
a) Amoebic Dysentary				
b) food poisoning				
c) fecal food poisoning				
d) Gastroenteritis				
e) Bronchitis				
8) Disease-causing bacteria on the is transmitted to humans as they				
9) Cockroaches carry a wide variety bodies, some of which, may be in				croorganisms in their
10) Cockroach ar reactions in people.	d cast sk	ins cont	ain allergens that r	may cause allergic
<ol> <li>For the most part, cockroaches a disease outbreaks.</li> </ol>	nd their fe	eces are	not associated wi	th any sever illnesses or
a) True				
b) False				
12) The most common cockroach spe a) American Cockroach	cies imp	ortant in	the United States	of America are:
b) Oriental Cockroach				
c) Brownbanded Cockroach				
d) Smokey Brown Cockroach				
e) Australian Cockroach				
f) Brown Cockroach				
g) Woods Cockroach				
h) Asian Cockroach				
i) Field Cockroach				
j) French Cockroach				
k) Communist Cockroach				
13) Most cockroaches are tropical an	d sub-tro	pical in d	origin. living mostly	out of doors.
a) True				
b) False				
14) They are mostly active at harborage, and mates.		, at w	hich time they fora	ge for food, water,

15) Cockroaches are especially fond of
a) starches, sweets, grease and meat
b) flowers and grass
c) bedding and towels
d) pet food and pet fecal matter
16) Cockroaches usually orient to protected that provide a warm and humid environment.
17) Cockroaches are social insects.
a) True
b) False
18) What is a shield like covering that projects forward over a cockroach's head?
a) ootheca
b) permethrin
c) nymph
d) pronotum
19) Cockroaches are well known for moving to new areas via "hitchhiking."
a) True
b) False
20) What is the order of stages of development for a cockroach?
a) nymph, egg, adult
b) larvae, nymph, adult
c) egg, nymph, adult
d) nymph, larvae, adult
21) What is the most economically important urban pest?
a) American cockroach
b) German cockroach
c) brown banded cockroach
d) oriental cockroach

<ul><li>22) Adults of both sexes of German cockroaches have well developed wings but they</li><li>a) only fly at night</li><li>b) only fly during the day</li></ul>
c) only fly when threatened d) never fly
23) What is a gravid?
a) males carrying egg capsules
b) females carrying egg capsules
c) an egg capsule
d) a dead egg capsule
24) Embryos in the newly formed egg capsule require a reasonably steady flow of water.
a) True
b) False
25) How many egg capsules can an adult female German cockroach produce in their lifetime?
a) females do not produce the egg capsules, the males do
b) 1-4
c) 10-12
d) 4 to 8
26) There are 6 or 7 nymphal stages for a German cockroach.
a) True
b) False
27) Adult German Cockroaches can live up to, but most will die from various causes long before that time.
28) If German cockroaches are seen during the day, the population is probably so large that the available cracks are already full.
a) True
b) False

29) If German cockroaches are visible during the day, this also may be a sign that
a) pesticides have been recently used
b) the population is under stress
c) they are fleeing from predators such as ants.
d) they have cockroach insomnia
e) both A, B, and C
30) German cockroaches prefer to rest on
a) wood
b) metal
c) grass
d) bedding
31) If water is present, adult German cockroaches can live about without food but young nymphs will die of starvation within
32) Movement between apartments usually does not occur unless the two adjacent apartments share common
a) walls
b) plumbing
c) vents
d) residents
33) Since they do not appear to forage or feed much at all, the most difficult portion of a German cockroach population to control is
a) gravid females
b) females
c) gravid males
d) males
34) Which is NOT another name for the American cockroach?
a) flying water bug
b) palmetto bug
c) waterbug
d) pill bug

b) 50 to 55 days	
c) a week	
d) style	
36) American cockroaches feed on a variety of foods, but seems to prefer  a) human flesh	
b) fresh cut flowers and fresh yard clippings	
c) fecal matter	
d) decaying organic matter	
37) Which type of adult cockroach are very dark brown or nearly black and usually have a somewhat greasy sheen to their body?  a) oriental	
b) german	
c) american	
d) brown-banded	
38) The peak number of oriental cockroach adults usually appears in a) late fall, early winter	
b) late spring, early summer	
c) late winter, early spring	
d) mid to late summer	
39) Which type of cockroach is most commonly found in yards, mulch, sewers, drains, and bathtubs?	
a) German	
b) oriental	
c) brown-banded	
d) field	
40) Which type of cockroach is commonly found on ceilings, high on walls, behind picture frames and light fixtures or near motors of refrigerators and other appliances?	;
a) brown-banded	
b) oriental	
c) american	
d) smokybrown	

35) At room temperature, nymphs will hatch out in...

a) 10 to 20 days

<ul> <li>41) Adult brown-banded cockroaches may live up to</li> <li>a) 2 years</li> <li>b) 10 years</li> <li>c) 10 months</li> <li>d) 1 month</li> </ul>
<ul> <li>42) Brown-banded cockroaches can be found feeding on almost anything but prefers feeding on.</li> <li>a) starchy materials</li> <li>b) decaying materials</li> <li>c) salty materials</li> <li>d) sweet materials</li> </ul>
<ul><li>43) Brown-banded cockroaches are quite active and the adult males may fly when disturbed.</li><li>a) True</li><li>b) False</li></ul>
<ul><li>44) Brown-banded cockroaches strongly avoid light and are not normally seen during the day.</li><li>a) True</li><li>b) False</li></ul>
45) Smokybrown cockroaches are closely related to the cockroach but are distinguished by their slightly smaller size, being slightly more than 1 inch long and uniform mahogany color.
<ul> <li>46) Smokybrown cockroach females lay a dark brown to black egg capsule which contains how many eggs?</li> <li>a) 12</li> <li>b) 104</li> <li>c) 6-8</li> <li>d) 24</li> </ul>
<ul> <li>47) In a protected area, smokybrown cockroaches will live for about how many days?</li> <li>a) 10-20</li> <li>b) 200-300</li> <li>c) 50-100</li> <li>d) 450-600</li> </ul>

48) Young nymph smokybrown cockroaches have
a) no antennae
b) long antennae with white tips
c) short antennae with white tips
d) curly antennae with striped tips
49) Normally, smokybrown cockroaches feeds on
a) trash
b) fecal material
c) just water
d) plant material
<ul><li>50) Smokybrown cockroaches move in and out of buildings to forage more than do American cockroaches and most other outdoor species.</li><li>a) True</li></ul>
,
b) False
51) Which type of cockroach are dark brown, with the sides of the thorax and the front half of the wings margined with yellow?
a) woods cockroaches
b) field cockroaches
c) brown-banded
d) American
52) The female woods cockroaches are strong fliers, whereas the males do not fly.
a) True
b) False
53) Which type of cockroach deposit their egg capsules loosely behind the loose bark of dead trees, fallen logs or stumps?
a) Australian cockroach
b) field cockroach
c) woods cockroach
d) brown cockroach
54) Woods cockroaches will wander about the house without congregating in any particular room.
a) True
b) False

<ul> <li>55) Which type of cockroach is 1 1/4 inch long, reddish brown and can be distinguished by prominent yellow stripes along the outer front edge of either wing and by a prominent dark spor in the center of the pronotum?</li> <li>a) field</li> <li>b) Australian</li> <li>c) oriental</li> </ul>
d) brown
<ul><li>56) Australian adult female cockroaches drop their egg capsules in a crack, crevice or other hidder area shortly after it is formed.</li><li>a) True</li><li>b) False</li></ul>
<ul> <li>57) This type of cockroach resembles the American cockroach except it has a broader body and less distinct or sometimes virtually no yellowish markings on the thorax. It is also a dark, reddis brown color with well-developed wings in both sexes.</li> <li>a) brown-banded</li> <li>b) asian</li> <li>c) oriental</li> <li>d) brown</li> </ul>
<ul> <li>58) This type of cockroach is associated with trees, particularly palm trees, in the southern states.</li> <li>a) brown</li> <li>b) oriental</li> <li>c) field</li> <li>d) asian</li> </ul>
<ul> <li>59) This type of cockroach is very similar to the German cockroach but can be distinguished by a blackish area on the front of the head, extending from the mouthparts to between the eyes.</li> <li>a) field</li> <li>b) brown</li> <li>c) woods</li> <li>d) Australian</li> </ul>
<ul><li>60) Field cockroaches make no attempt to hide in dark cracks when indoors.</li><li>a) True</li><li>b) False</li></ul>

61) This type of cockroach will fly quite readily and for relatively long distances. They will fly to light at night, even tv screens and onto people.
a) field
b) brown
c) woods
d) asian
62) The presence of cockroaches is often detected by their damage or by the fecal matter, called, they deposit.
63) Cockroaches may eats things such as
a) tabacco products
b) glue or paste, starches, and certain colors of dyes
c) anything that has oxidized
d) cardboard and paper products
64) Cockroach management should be proposed as
a) A one time treatment.
b) A one size fits all treatment.
c) More than a one time treatment.
d) A hydration problem.
65) Pest management firms should provide a higher level of service than just spray treatments.
a) True
b) False
<ul><li>66) The main objective of a cockroach management program is to manage a cockroach infestation to the lowest possible level consistent with client expectations.</li><li>a) True</li></ul>
, and the second se
b) False
67) Far more food is contaminated by cockroaches than is eaten by them,
a) True
b) False
68) What are the four steps of an effective cockroach control program?
a) treatment, client education, follow-up inspection
b) treatment and follow up
c) client education and let them figure it out

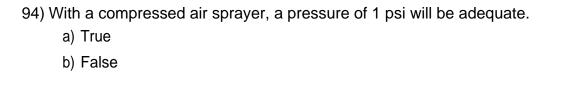
d) inspection and survey, treatment, client education, and follow-up

69) What is the objective of a cockroach management program?
<ul> <li>a) To manage a cockroach infestation to the lowest possible level consistent with client expectations</li> </ul>
b) To manage a cockroach migration to the client's neighbors
c) To manage a cockroach infestation in the majority of the property
d) To manage a cockroach family reunion
70) Cockroach management should be proposed as more than a one-time treatment.
a) True
b) False
71) Pest management firms should provide a higher level of service than just spray treatments.  a) True
b) False
72) The primary goal of a cockroach inspection is to locate as many cockroach hiding places, c, as possible.
73) For highly complex situations, where heavy infestation exists, a series of what might be necessary?
a) Multiple power hoses
b) Diagrams and extensive notes
c) Extended lunch breaks
d) Additional billing cycles
74) What tool(s) may be necessary to conduct a professional cockroach inspection?  a) A mechanic's mirror
b) Pliers
c) Heavy duty flashlight
d) All of the above
75) When conducting a cockroach inspection, especially for German cockroaches, it may be important to
a) Whistle
b) Drop food crumbs
c) Check room corners near the ceiling
d) Crawl around

76) While performing a cockroach inspection, the inspector should only stand in the center of the room.
a) True
b) False
77) The best way to find cockroach harborages is to think like a cockroach.  a) True
b) False
78) A cockroach, using trapping techniques, is sometimes necessary to determine the extent of an infestation.
<ul><li>79) Pheremone traps can assist in narrowing down the areas that may be serving as sources of infestation or that are not receiving proper insecticide treatment.</li><li>a) True</li><li>b) False</li></ul>
80) Cockroaches have a behavioral trait known as, which means that they prefer to have the side or top of their body touching another object.
<ul><li>81) Cockroach traps placed even a few inches from a wall may not be found by the cockroaches as easily as traps placed against walls.</li><li>a) True</li><li>b) False</li></ul>
<ul><li>82) One hour of trapping with a sufficient number of trap locations will usually provide enough information to design a more complete and effective management program.</li><li>a) True</li><li>b) False</li></ul>
83) The first aspect of the treatment phase is
84) Sanitation alone can substantially reduce German cockroach numbers.  a) True
b) False
85) Sanitation involves which of the following:
a) Degreasing surfaces
b) Removing food and water sources
c) Caulking and performing structural repairs
d) All of the above

a) True
b) False
<ul><li>87) Use of high heat (120 degrees and above) or cold (0 degrees and below) may offer effective German cockroach control in situations where insecticides cannot be used.</li><li>a) True</li><li>b) False</li></ul>
88) Which of the following is the most effective in affecting cockroach behaviors?
a) Electromagnetic devices
b) Insecticide applications
c) Vacuum cleaners
d) Ultrasounds
<ul><li>89) The best cockroach management comes from searching for, locating, and treating harborages.</li><li>a) True</li><li>b) False</li></ul>
90) German cockroaches are most commonly found near a) Sand, salt, and sun
b) Dark, cool, and moist areas
c) Food, water, and warmth d) Food, family, and quiet
u) Food, family, and quiet
91) German cockroaches are easy to find.
a) True
b) False
92) The best places to apply treatment for German cockroaches are:  a) In the freezer.
b) Under a table.
c) On the dance floor.
d) In cracks and crevices.
<ul><li>93) Incomplete or improper insecticide application is usually the cause of control failure.</li><li>a) True</li><li>b) False</li></ul>

86) When used alone, traps are capable of removing more than 90% of a cockroach population.



- 95) Dusts are one of the most effective types of residual insecticide application for German cockroach control.
  - a) True
  - b) False