

Truman's Scientific - Chapter 6 - COCKROACHES

- 1) Based on fossil evidence, cockroaches are known to have been present on earth for nearly _____ years.
 - a) 150 million
 - b) 200 Thousand
 - c) 500 Million
 - d) 3 trillion
 - e) 350 Million**
 - f) 2,000

- 2) There are approximately _____ species of cockroach worldwide!.
 - a) 3,500**
 - b) 3,000
 - c) 2,500
 - d) 2,000

- 3) About [**70**] species of cockroach are found in the United States.

- 4) Cockroaches produce _____ from various points in their bodies that can effect the flavors of food.
 - a) fecal dropping
 - b) bacterial discharge
 - c) odorous secretions
 - d) saliva discharge

- 5) When cockroach populations are high, these secretions may result in a characteristic [**odor**] in the general region of the infestation.

- 6) Disease producing organisms, such as _____ have been found on cockroach bodies.
 - a) amoebas
 - b) democrats
 - c) mitochondrial virus agents
 - d) bacteria**
 - e) flagellum

- 7) Different forms of _____ appears to be the principle disease(s) spread by cockroaches.
- Amoebic Dysentary
 - food poisoning
 - fecal food poisoning
 - Gastroenteritis
 - Bronchitis
- 8) Disease-causing bacteria on the [**legs**] and the [**bodies**] of cockroaches is transmitted to humans as they touch [**food**] and [**utensils**] while they [**forage**].
- 9) Cockroaches carry a wide variety of [**protozoa**] and other microorganisms in their bodies, some of which, may be involved in the spread of disease.
- 10) Cockroach [**excrement**] and cast skins contain allergens that may cause allergic reactions in people.
- 11) For the most part, cockroaches and their feces are not associated with any sever illnesses or disease outbreaks.
- True**
 - False
- 12) The most common cockroach species important in the United States of America are:
- American Cockroach**
 - Oriental Cockroach**
 - Brownbanded Cockroach**
 - Smokey Brown Cockroach**
 - Australian Cockroach**
 - Brown Cockroach**
 - Woods Cockroach**
 - Asian Cockroach**
 - Field Cockroach**
 - French Cockroach
 - Communist Cockroach
- 13) Most cockroaches are tropical and sub-tropical in origin, living mostly out of doors.
- True**
 - False
- 14) They are mostly active at [**night**], at which time they forage for food, water, harborage, and mates.

- 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 [**cracks and crevices**] 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

- 22) Adults of both sexes of German cockroaches have well developed wings but they...
- a) only fly at night
 - b) only fly during the day
 - 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 [**one year**, 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 [**one month**] without food, but young nymphs will die of starvation within [**10 days**].

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**

- 35) At room temperature, nymphs will hatch out in...
- a) 10 to 20 days
 - 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

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

- 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
- 50) Smokybrown cockroaches move in and out of buildings to forage more than do American cockroaches and most other outdoor species.
- a) True**
 - 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

- 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 spot in the center of the pronotum?
- a) field
 - b) Australian**
 - c) oriental
 - d) brown
- 56) Australian adult female cockroaches drop their egg capsules in a crack, crevice or other hidden area shortly after it is formed.
- a) True**
 - b) False
- 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, reddish brown color with well-developed wings in both sexes.
- a) brown-banded
 - b) asian
 - c) oriental
 - d) brown**
- 58) This type of cockroach is associated with trees, particularly palm trees, in the southern states.
- a) brown**
 - b) oriental
 - c) field
 - d) asian
- 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.
- a) field**
 - b) brown
 - c) woods
 - d) Australian
- 60) Field cockroaches make no attempt to hide in dark cracks when indoors.
- a) True**
 - b) False

- 61) This type of cockroach will fly quite readily and for relatively long distances. They will fly to lights 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 **[frats]**, they deposit.
- 63) Cockroaches may eat things such as_____.
- a) tobacco 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
- 66) The main objective of a cockroach management program is to manage a cockroach infestation to the lowest possible level consistent with client expectations.
- a) True**
 - 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?
- a) **To manage a cockroach infestation to the lowest possible level consistent with client expectations**
 - 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, or [**haborages**], 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 [**survey**, using trapping techniques, is sometimes necessary to determine the extent of an infestation.
- 79) Pheromone traps can assist in narrowing down the areas that may be serving as sources of infestation or that are not receiving proper insecticide treatment.
- a) True**
 - b) False
- 80) Cockroaches have a behavioral trait known as [**thigmotaxis**, which means that they prefer to have the side or top of their body touching another object.
- 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.
- a) True**
 - b) False
- 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.
- a) True
 - b) False**
- 83) The first aspect of the treatment phase is [**sanitation**.
- 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**

- 86) When used alone, traps are capable of removing more than 90% of a cockroach population.
- a) True
 - b) False**
- 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.
- a) True**
 - b) False
- 88) Which of the following is the most effective in affecting cockroach behaviors?
- a) Electromagnetic devices
 - b) Insecticide applications**
 - c) Vacuum cleaners
 - d) Ultrasounds
- 89) The best cockroach management comes from searching for, locating, and treating harborages.
- a) True**
 - b) False
- 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
- 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.**
- 93) Incomplete or improper insecticide application is usually the cause of control failure.
- a) True**
 - b) False

94) With a compressed air sprayer, a pressure of 1 psi will be adequate.

a) True

b) False

95) Dusts are one of the most effective types of residual insecticide application for German cockroach control.

a) True

b) False