

40

The statement “zoology is ecology” (line 6) mainly serves to

- A) propose that two areas of scientific knowledge be merged.
- B) point out that knowledge obtained in one field of research will lead to expertise in another.
- C) assert a point about biological science that is supported by the example in the passage.
- D) suggest that one field of scientific research has completely supplanted another.

41

According to the passage, one similarity between rotation-resistant rootworms and normal rootworms is that they both

- A) reduce crop productivity by extracting nutrients from the soil.
- B) produce larvae that feed on the plant roots of crops.
- C) adapt to crop rotation by maintaining high levels of enzymes in their guts.
- D) contain the same quantity and composition of bacteria in their guts.

42

Which choice most clearly provides information indicating how some rootworms have overcome farmers’ efforts to eradicate them?

- A) Lines 15-17 (“These . . . die”)
- B) Lines 18-20 (“But . . . corn”)
- C) Lines 25-28 (“Researchers . . . question”)
- D) Lines 41-43 (“And . . . rotation”)

43

The central claim in the fourth paragraph (lines 23-35) is that

- A) extensive study of the rootworm’s genes was insufficient to determine why some rootworms are rotation resistant.
- B) the rootworm’s ability to adapt to pest control methods is unique among insects.
- C) the genetic profile of rootworms is significantly more complex than researchers initially believed.
- D) our current understanding of genetics is inadequate to allow researchers to understand why some rootworms are rotation resistant.

44

As used in line 24, “separate” most nearly means

- A) distinguish.
- B) discharge.
- C) extract.
- D) scatter.

45

According to the passage, the gut bacteria of rotation-resistant rootworms

- A) help the rootworms survive in soybean crops.
- B) are responsible for lowering the amount of cysteine protease in the rootworms’ guts.
- C) make the rootworms less vulnerable to being killed by antibiotics.
- D) are transferred to the larvae that hatch from the rootworms’ eggs.

46

Which choice provides the best evidence for the answer to the previous question?

- A) Lines 29-30 (“The western . . . Seufferheld”)
- B) Lines 39-40 (“The rotation-resistant . . . ones”)
- C) Lines 44-47 (“The bad . . . study”)
- D) Lines 54-55 (“These . . . soybeans”)

47

The main idea of the last paragraph is that

- A) cysteine proteases are harmful to rootworms when present in large quantities in the body.
- B) eggs laid by rotation-resistant rootworms will hatch into crops of soybeans.
- C) bacteria unique to rotation-resistant rootworms allow them to digest soybeans.
- D) rotation-resistant rootworms do not digest soybeans using cysteine proteases.

STOP

**If you finish before time is called, you may check your work on this section only.
Do not turn to any other section.**