
PRE-ASSESSMENT

QUESTIONS AND RESULTS

Q1

No-till drills are primarily designed to plant what type of seed?

- ☐ Larger seeds, such as corn and sunflowers
- ☒ Smaller seeds, including cereal rye and wheat
- ☐ All types of seeds

Question focus

No-till Equipment

24% of Participants answered the question correctly.

Q2

Heavy soils with a plow plan or restrictive layer should consider _____ before transiting to no-till.

- ☐ Planting a cover crop containing only tillage radish
- ☒ Deep Ripping
- ☐ Vertical Tillage

Question focus

No-till Preparation

41% of Participants answered the question correctly.

Q3

Farmers that were accustomed to incorporating manure using tillage should consider adjusting fertilization by _____.

- ☐ Switching to Urea-based fertilizer
- ☒ Adding pop-up fertilizer
- ☐ Broadcasting manure during hot, dry weather conditions

Question focus

Nutrient Management

43% of Participants answered the question correctly.

Q4

What is one of the biggest differences between no-till equipment and conventional planting equipment?

- ☐ Different Opening Mechanism (Disks vs Bits)
- ☒ More down-pressure/down-force applied
- ☐ Different Closing Mechanisms (Tines vs Wheels)

Question focus

No-till Equipment

54% of Participants answered the question correctly.

Q5

Planting green refers to ____?

Question focus

- ☐ Using zero herbicides and all non-gmo corn and soybeans
- ☒ Planting the cash crop into standing cover crop that has not been terminated yet
- ☐ Incorporating the cover crop as a green manure by tillage practices

Cover Crop Termination

52% of Participants answered the question correctly.

Q6

The seed trench or seed slot is typically formed by the ____.

Question focus

- ☐ Slot Hoe
- ☒ Opening Disk
- ☐ Wheeled Trencher

No-till Equipment

53% of Participants answered the question correctly.

Q7

Hair-pinning is typically caused by ____.

Question focus

- ☐ Inadequate bearing grease
- ☒ Wet planting conditions
- ☐ Tight turns around field borders
- ☐ Poor blade rotation

No-till Equipment

42% of Participants answered the question correctly.

Q8

True or false: Farmers do not need to add inoculant to legume cover crops planted after soybeans harvest

Question focus

- ☐ True
- ☒ False

Cover Crop Application

50% of Participants answered the question correctly.

Q9

Herbicide carryover is the highest concern after ...?

Question focus

- ☐ Wet growing seasons
- ☒ Dry growing seasons
- ☐ Grain corn harvest
- ☐ Wheat harvest

Cover Crop Selection

61% of Participants answered the question correctly.

Q10

VNS seed is?

- ☐ Variable Nutrient Standards
- ☒ Variety Not Stated
- ☐ Vetch (Non-Standard)
- ☐ Viable Noxious Seed

43% of Participants answered the question correctly.

Question focus

Cover Crop Selection

Q11

Aerially applied ryegrass should be ---?

- ☐ Inoculated
- ☒ Coated
- ☐ Deburred
- ☐ Pre-Moistened

47% of Participants answered the question correctly.

Question focus

Cover Crop Application

Q12

How many acres per day can a farmer plant with a 10' no-till drill?

- ☐ 5-10 acres
- ☒ 25-50 acres
- ☐ 100-200 acres
- ☐ 300-500 acres

67% of Participants answered the question correctly.

Question focus

Cover Crop Application

Q13

What cover crops cannot be terminated using a roller-crimper?

- ☐ Cereal Rye
- ☒ Ryegrass
- ☐ Triticale
- ☐ Hairy Vetch

27% of Participants answered the question correctly.

Question focus

Cover Crop Termination

Q14

True or False: Corn should be planted 4-6 days after cover crops are terminated with herbicides, when cover crops are still moist.

*Question focus***No-till Preparation**

- ☐ True
- ☒ False

40% of Participants answered the question correctly.

Q15

Glyphosate is more effective under what conditions?

*Question focus***Cover Crop Termination**

- ☐ When applied during the late afternoon and evening
- ☐ When applied during cool, cloudy conditions
- ☒ When applied during warm, sunny conditions
- ☐ When applied to cover crops in reproductive phases

51% of Participants answered the question correctly.

SUMMARY

On average, applicants correctly answered 48% of all questions.

The median number of correct responses was 6/15.

The results of the pre-assessment were normally distributed with some participants answering all questions correctly and some applicants answering no question correctly.

Conclusion: The educational program would need to cover very basic details about no-till and cover crop implementation. A large number of ASPs do not know foundational knowledge.