

## Stubble Options for Winter Wheat in the Black Soil Zone of Western Canada

### DIRECTIONS:

1. Read the self-study exam carefully.
2. Answer the questions to this self-study exam by circling the best answer for each question.
3. Complete the self-study exam registration form.
4. Fold and place this self-study examination page in an envelope.
5. Enclose a payment for processing fees of \$14.95 for CAAR Members, and \$24.95 for non-members, plus GST or HST.
6. Mail your self-study exam and payment to: **The CCA Self-Study Exam**  
c/o Canadian Association of Agri-Retailers  
628-70 Arthur St., Winnipeg, MB R3B 1G7

### SELF-STUDY EXAM:

After reading the pre-approved self-study article, please answer this 10-question exam and return it to CAAR. An exam score of 70 per cent or higher will earn you one credit in Crop Management.

You can take this exam online! Go to **caar.org** and click on Training to access the online article and exam. Contact the CAAR office at 800-463-9323 or info@caar.org for your Member login if you don't have it already.

1. **Successful winter wheat production in most of western Canada requires planting a cold tolerant cultivar that is capable of accumulating \_\_\_\_\_ of snow?**
  - A. At least 20 cm
  - B. At least 15 cm
  - C. At least 10 cm
  - D. At least 5 cm
2. **Winter wheat should be sown within what time period to allow for sufficient growth to optimize winter survival and subsequent yield?**
  - A. Second week of August to end of the first week of September
  - B. Last week of August to end of the second week of September
  - C. First week of September to the last week of September
  - D. Second week of September to the first week of October
3. **What is the most common stubble that winter wheat is planted into?**
  - A. Wheat
  - B. Soybeans
  - C. Pea
  - D. Canola
4. **Which crop was not used in the establishment year of the study?**
  - A. Pea
  - B. Lentil
  - C. Canola
  - D. Oat
5. **Crops grown on which types of stubble most often had the greatest yield?**
  - A. Canola, pea, and wheat stubble
  - B. Canola, pea and barley silage stubble
  - C. Wheat, pea and barley stubble
  - D. Pea, wheat, and barley silage stubble
6. **Which stubble options had the generated the greatest kernel protein concentration when compared with canola and oat stubble?**
  - A. Pea and barley silage stubble
  - B. Pea and barley (grain) stubble
  - C. Barley silage and wheat stubble
  - D. Wheat and pea stubble

7. In which growth stages of the plant did average leaf spot disease severity become the most important?
- A. Main shoot tillering to booting
  - B. Stem elongation to cereal heading
  - C. Cereal heading to late milk development
  - D. Cereal heading to soft dough
8. Average barley leaf disease severity at heading and soft dough was how many times greater on barley stubble versus other stubble types?
- A. 10
  - B. 16
  - C. 24
  - D. 38
9. Average snow depth across winter months was about how much less for pea and barley silage stubble versus canola and cereal stubble types?
- A. 3 times
  - B. 3 cm
  - C. 3 inches
  - D. 3 feet
10. What did the study conclude as the ideal alternative crop stubble strategy instead of canola when sowing winter wheat?
- A. Pea
  - B. Barley silage
  - C. Barley (grain)
  - D. Oat

## SELF STUDY EXAM REGISTRATION FORM:

(Please note: You must have your CCA Certification number on the form in order to be eligible for the CEU.)

CAAR Member       Non-Member

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Payment Option:  Cheque enclosed (Made payable to the Canadian Association of Agri-Retailers)     VISA     MasterCard

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I approve payment by credit card and certify that I alone completed this self-study course, recognizing that an ethics violation may revoke my CCA status.

Signature: \_\_\_\_\_

*This exam issued April 2017, expired April 2020*

## EXAM EVALUATION FORM

(PLEASE TAKE A MOMENT TO PROVIDE US WITH SOME FEEDBACK ON THIS EXAM):

Rating Scale: 1 = Poor 5 = Excellent

Information presented will be useful in my daily crop advising activities.	1	2	3	4	5
Information was organized and logical.	1	2	3	4	5
Graphics/Tables were appropriate and enhanced my learning.	1	2	3	4	5
This article addressed the stated competency area and performance objective(s).	1	2	3	4	5
Topics I would like to see addressed in future materials: _____					