Advanced Crop Science

Curriculum Guide: Advanced Crop Science

Unit: XI. Rice Production

Unit Objective:

Students will demonstrate an understanding of basic principles of rice production by identifying and describing food and nonfood by-products and end products of rice production and presenting their findings on a poster or in a slide show presentation, as determined by the instructor.

Show-Me Standards: 1.2, SC8

References:

Advanced Crop Science. University of Missouri-Columbia, Instructional Materials Laboratory, 2000.

California Rice. California Rice Commission. Accessed November 5, 2003, from http://www.calrice.org/home.html.

National Agricultural Statistics Service. U. S. Department of Agriculture. Accessed November 5, 2003, from http://www.usda.gov/nass/.

Rice. Environmental Literacy Council. Accessed November 5, 2003, from http://www.enviroliteracy.org/article.php/573.html.

Riceweb. International Rice Research Institute. Accessed November 11, 2003, from http://www.riceweb.org/.

Students may use additional outside sources to complete this activity.

Instructional Strategies/Activities:

- Students will engage in study questions in lessons 1 through 7.
- Students will complete AS 5.1, The Harvested Crop; AS 5.2, Features of a Harvested Rice Variety; and AS 6.1, Rice Crops on the Market.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. XI-5 (3), p. XI-16 (2), pp. XI-25–XI-26 (1), p. XI-36 (2, 3), and p. XI-64 (2).

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Performance-Based Assessment:

Each student will identify food and nonfood by-products and end products of rice production. For each listing, students will include a caption that provides factual information about that product or use. For example, along with a food use of rice, a student could include information about the nutritional value of rice or the amount of rice the average person consumes in a year. Students will present their findings on a poster or in a slide show presentation, as determined by the instructor.

Assessment will be based on the overall content and presentation of the poster or slide show.

Unit XI—Rice Production Instructor Guide

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

- 1. Have students identify as many different food and nonfood by-products and end products of rice production as they can.
 - a. If desired, lead the class in finding a few examples. Guide them toward thinking broadly about rice-related products, if needed.
 - b. If desired, have students include a category for potential uses that are being explored through research.
- 2. For each item, have students write a caption that provides factual information about that product or use. For example, along with a food use of rice, a student could include information about the nutritional value of rice or the amount of rice the average person consumes in a year.
- 3. Have students present their products, uses, and captions on a poster or have students use their findings to develop a slide show using presentation software. Tell students which format is preferable.
- 4. Have students incorporate appropriate visual elements, such as illustrations, charts, or graphs, as needed to make the poster or slide show interesting and informative.
- 5. Students may use material found in the unit or discussed in class as well as additional outside material to complete their poster or slide show.
- 6. Students may not use the source material word for word and must provide a complete bibliography of their sources along with their poster or slide show.
- 7. The final assessment score will be based on the overall content and presentation of the poster or slide show.

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Unit XI—Rice Production Student Handout

- 1. Identify as many different food and nonfood by-products and end products of rice production as you can.
- 2. For each item, write a caption that provides factual information about that product or use.
- 3. Present your products, uses, and captions on a poster or use them to make a slide show with presentation software, as directed by your instructor.
- 4. Include appropriate visual elements, such as illustrations, charts, or graphs, as needed to make the poster or slide show interesting and informative.
- 5. You may use material found in the unit or discussed in class as well as additional outside material to complete your poster or slide show.
- 6. You may not use the source material word for word and must provide the instructor with a complete bibliography of your sources along with your poster or slide show.
- 7. Your final assessment score will be based on the overall content and presentation of your poster or slide show.

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Unit XI—Rice Production Scoring Guide

Name

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Thoroughness	Poster or slide show provides a thorough overview of rice-related by-products and end products	Failed	Poor	Fair	Good	Excellent	X 8.75	
Accuracy	Information is accurate	Failed	Poor	Fair	Good	Excellent	X 8.75	
Presentation	Poster or slide show is well organized and eyeappealing	Failed	Poor	Fair	Good	Excellent	X 5	
Technical Considerations	Spelling, grammar, and punctuation are correct	Failed	Poor	Fair	Good	Excellent	X 2.5	
TOTAL								

Final Assessment Total _____/100 pts.

Comments: