

## Precision Agriculture for Improving Wheat Yield and Quality

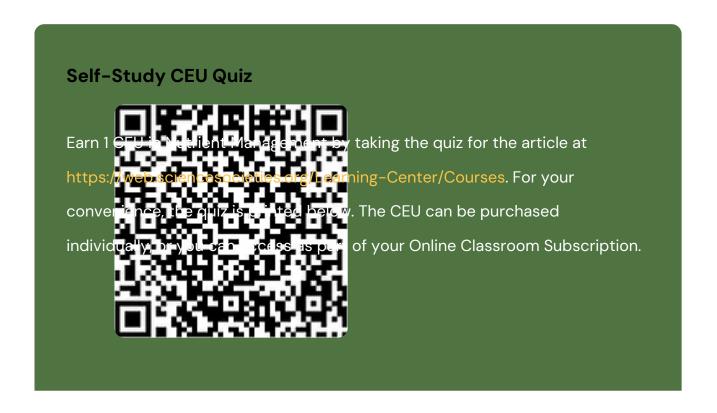
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Nitrogen is one of the most important nutrients for crops. It is required in large amounts for crop production and demands precise nutrient management methods due to its highly mobile property in plants and soils and high chances of leaching. Precise nutrient management is also important for improving the yield and quality of grains, minimizing the input, and maximizing the efficiency. In this episode, Dr. Olga Walsh shares her research on precision nitrogen management for yield and protein

content estimation on spring wheat and sugarbeet by using different handheld sensors, drones, and remote-sensing approaches.



- 1. Nitrogen is highly mobile in plants and soils.
  - a. True.
  - b. False.
- 2. Precise nitrogen management is important for
  - a. higher yield.
  - b. higher protein content.
  - c. higher efficiency.
  - d. All of the above.

a. True.	
b. False.	
4. What is the critical period for the application of nitrogen for better	
yield and nutrients?	
a. Germination.	
b. Harvesting.	
c. Flowering.	
d. Vegetative.	
5. High protein content is desired in spring wheat grains for	
a. baking quality.	
b. nutrition.	
c. high market value.	
d. All of them.	

3. Greenness and reflectance of plants are key features measured by

sensors to determine biomass and nutrient demand.

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