

**BASF**

We create chemistry

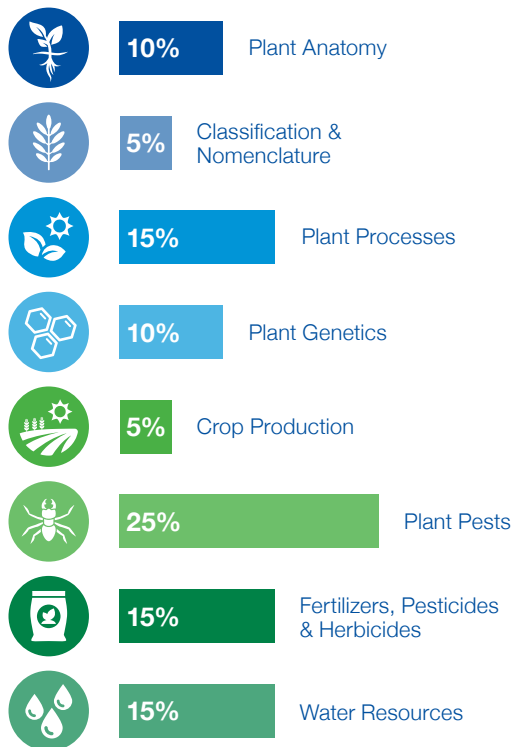
# Plant Science Certification



The BASF Plant Science Certification verifies individuals have acquired the knowledge and skills necessary to excel in a variety of plant, natural and environmental science related fields.

## Certification Exam

The certification exam, tested for on the iCEV platform, consists of 100 questions and assesses knowledge and skills from the following weighted industry standards:



## Meeting the Industry Need

- + Assesses Competencies Based on Weighted Industry-Valued & Industry-Accepted Standards
- + Validates Knowledge & Skills
- + Allows Employers to Identify & Connect with Skilled Candidates
- + Jump-Starts Individuals' Careers

[www.icevonline.com/plantscience](http://www.icevonline.com/plantscience)

## Industry Standards Breakdown

### Plant Anatomy

- Plant Cell Biology
- Plant Structures

### Classification & Nomenclature

- Plant Types
- Plant Classification
- Taxonomic Hierarchy
- Cells, Tissues, Organs & Organ Systems

### Plant Processes

- Cell Cycle
- Plant Life Cycle
- Plant Growth
- Plant Hormones & Growth Regulations
- Photosynthesis Respiration & Transpiration
- Plant Nutrition

### Plant Genetics

- Plant Reproduction
- Plant Biology
- Plant Breeding
- Biotechnology

### Crop Production

- Midwest Region
- Northeast Region
- Southern Region
- Western Region

### Plant Pests

- Bacterial Diseases
- Fungal Diseases
- Viruses
- Chewing Insects
- Sucking Insects
- Vertebrates
- Weeds

### Fertilizers, Pesticides & Herbicides

- Application Methods
- Equipment
- Records & Schedules
- Proper Handling & Storage
- Effects on the Environment
- Environmental Regulations

### Water Resources

- Properties of Water
- Sources of Water
- Hydrologic Cycle
- Freshwater Storage
- Water Quality & Pollution
- Wastewater
- Water Rights
- Water & Watershed Conservation

## Example Assessment Questions

1. Which of the following is the cause of widespread phosphorus deficiency problems?

- A Warm weather
- B Cold weather
- C High winds
- D Too little rain

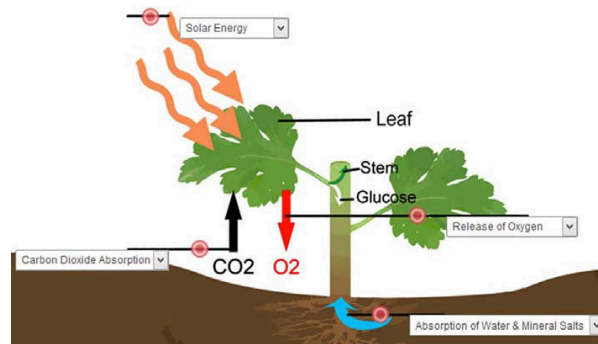
2. In a 100-pound bag of 8-0-28, how many pounds of phosphate are present?

- A 8
- B 4
- C 0
- D 28

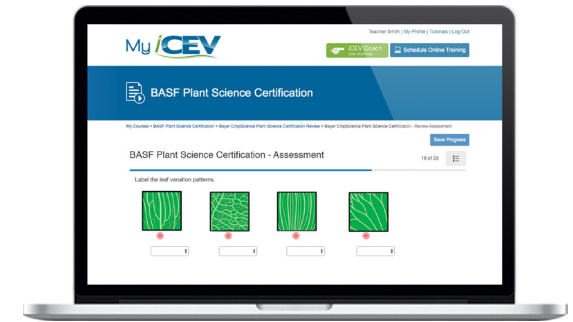
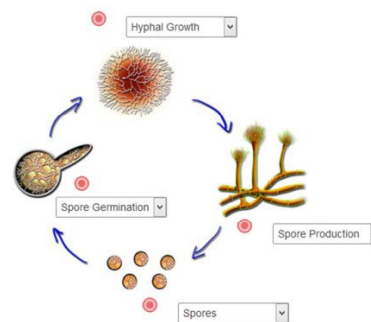
3. Which of the following are required in relatively large proportion for the growth and development of plants?

- A Fertilizers
- B Water
- C Macronutrients
- D Micronutrients

4. Label the processes of the photosynthesis cycle



5. Label the life cycle of Fungi.



## Testing Platform

BASF Science utilizes iCEV, a division of CEV Multimedia, as the testing platform for this certification.

iCEV fulfills the following responsibilities:

1. Provides secure testing technology for certification exams
2. Regulates testing environments
3. Works with secondary and post-secondary academic institutions, workforce development associations and the public at large to offer certification options for career advancement
4. Provides certification verification to employers for potential job applicants
5. Offers optional certification exam preparation materials

## About BASF

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. More than 117,000 employees in the BASF Group work on contributing to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio is organized into six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions. BASF generated sales of €59 billion in 2019. BASF shares are traded on the stock exchange in Frankfurt (BAS) and as American Depositary Receipts (BASFY) in the U.S. Further information at [www.basf.com](http://www.basf.com).

“At BASF our goal is to build a sustainable future for agriculture through scientific innovation. The plant science certification will provide a foundation to build on for tomorrow’s leaders as they seek to meet societal demands for food and fiber.”

**Ginger G. Light, Ph.D.**  
TD Trait Introgression & Greenhouse Manager  
BASF