國立臺灣大學 104 學年度碩士班招生考試試題

※ 注意：請於試卷內之「非選擇題作答區」標明題號依序作答。

1. How plants adapt to low phosphorus availability? (10 points)
2. Describe the mechanism of biological nitrogen fixation. (10 points)
3. Phosphorus and iron are important elements for plant growth. Describe methods to determine the (a) concentrations, and the (b) distribution in plants. (10 points)
4. Describe (a) nitrogen use efficiency (NUE); (b) factors affect NUE. (10 points)
5. Describe (a) the place, (b) the importance, and (c) factors influencing long distance transport of solutes in plants. (10 points)
6. Describe the physiological and molecular mechanisms of H^+ toxicity. (10 points)
7. To set up an experiment to prove that whether the element is essential to plants. (15 points)
8. Describe the root responses to iron deficiency. (10 points)
9. Name the three distinct physio-types of plants for calcium nutrition. (5 points)
10. What are the main enzymatic steps of nitrogen assimilatory process from nitrate to glutamine? (10 points)

試題隨卷繳回