PLANT PHYSIOLOGY Lecture 2 - Levels of Organization & What is life?

I. Definition of plant physiology

- **A. Study of plant function**
  - **1. Plant molecular biology**
  - **2. Plant biochemistry**
  - **3. Plant metabolism**
  - **4. Plant cytology**
  - **5. Plant anatomy**
  - **6. Crop physiology**
  - **7. Environmental physiology**
  - **8. Physiological ecology**

II. Levels at which plant physiology is studied

- **A. Subatomic particle**
- **B. Atom**
- **C. Molecule**
- **D. **Protein (enzyme)**
- **E. Organelle**
- **F. Cell**
- **G. Tissue**
- **H. Organ**
- **I. Organ system**
- **J. Multicellular organism**
- **K. Population**
- **L. Community**
- **M. Ecosystem**
- **N. Biome**
- **O. Biosphere**

SAM POCTOOMP Can Eat Big Bananas

III. Class approach to studying plant physiology

- **A. Chemistry**
- **B. Anatomy**
- **C. Metabolism**
  - **1. Photosynthesis**
  - **2. Respiration**
  - **3. Other metabolism**
- **D. Molecular manipulations**
- **E. Xylem transport and nutrition**
- **F. Phloem transport and partitioning**
- **G. Growth and development**
- **H. Plant growth regulation**
- **I. Responses to environment**
- **J. Crop physiology & ecological aspects**