

Introduction to research on plant growth. We hope that this research will contribute to providing a comprehensive vision about this vital phenomenon, which is the basis of the continuity of life on Earth, and highlights the importance of preserving plants and enhancing their growth to achieve a sustainable environmental balance. Plant growth includes precise and diverse processes starting from the germination stage, then developing into a fully developed plant capable of performing its vital functions through its various organs such as stems, roots, leaves, and flowers. Endogenous factors include genes and plant hormones, such as auxin and cytokinin, that regulate and coordinate cellular and reproductive processes. We will discuss the environmental and internal factors that affect growth, in addition to the challenges facing plants in harsh environments such as desertification or pollution. External factors include light, water, soil, temperature, and carbon dioxide, which provide the appropriate environment for plant development and growth.