



The Future of Agriculture: Advances in Plant Growth Promoter Technology

The agricultural practices have evolved over time. So do have the crop production and crop protection products. Farmers and gardeners no longer use the same type of fertilizers for all the plants. The increasing awareness about the study of the soil type and its respective needs, the ideal season for fertilization, important micronutrients for plants, and the negative effects of excessive use of macronutrients have revolutionized the plant growth promoter industry. The best part is that these developments are easily available as [plant stimulants and growth regulators online](#), making them accessible in the comfort of a few clicks.

Recent Advances in Plant Growth Promoter Technology



Nitrogen Fixation

Nitrogen is a vital nutrient for plant growth. However, the atmosphere has the highest amount of nitrogen it still is unavailable to plants, until nitrogen fixation. Various plant growth regulators are able to colonize plant internal tissues and enhance their growth-promoting effect. This is done by providing a limiting oxygen environment required for the activation of nitrogen fixation and a more efficient transfer of the nitrogen.

ACC Deaminase

Ethylene is an essential metabolite for the growth and development of plants. Being a growth regulator high concentrations of ethylene can considerably reduce the crop yield. Plant growth promoters that have ACC deaminase serve as a solution for this as they are able to regulate ethylene production by metabolizing ACC which is an immediate precursor of ethylene biosynthesis in higher plants. Further, they facilitate plant growth and development since they are able to decrease ethylene levels. Thus, plant resistance to various stresses such as the presence of phytopathogenic bacteria, polyaromatic hydrocarbons, heavy metals, salinity, and drought is increased.

Biological Control

Plant growth regulators exert biological control on plants by mechanisms such as competition for nutrients, exclusion of niches, systemic resistance induction, and antagonistic metabolite production. This prevents the deleterious effect of phytopathogens, weeds, and insects on plant growth and

development. Biocontrol also guards the fresh produce against infectious diseases and also during storage.

You can also utilize these products to the benefit of your field thanks to the availability of the [best plant growth promoter products in India](#).

Buy Organic Fertilizers Online

If you are also looking forward to buying some good organic fertilizers online, Kisan4u is the right platform. It provides fertilizers in various forms including granular and **plant food organic liquid fertilizers**. They also provide customized solutions for individual plants such as the [best natural fertilizers for flowering plants](#). These fertilizers are offered by some of the best fertilizer brands including Kutra, Aal, Virus-G, Miticide, PROSPER, CLASSIC, and Ezzy Garden. So do not wait any further, and stock up your organic fertilizer pile by ordering them from the incredible platform of Kisan4u now.