

MiZax

Growing more with **smarter plant science.**

Developed by Namya · AgriTech · Food Security



THE PROBLEM

Feeding more people with less, under harsher conditions

By 2050 the world will need roughly 50% more food, yet 30% of the world's soil is already degraded and 67% of global freshwater goes to irrigation. In Saudi Arabia the pressure is acute: rising temperatures cut crop yields by 7–25%, soil salinity by a further 17–38%, and 86% of the water drawn comes from non-renewable aquifers. The old answer — more fertilizer and more water — only deepens soil degradation, water contamination and emissions.

THE SOLUTION

Not a fertilizer. A plant signal

MiZax mimics zaxinone, a naturally occurring metabolite that regulates plant growth and development. Rather than force growth with heavier inputs, it helps the plant regulate its own growth and use resources more efficiently — stronger roots, better nutrient uptake, optimized photosynthesis and healthier architecture. The result is more crop production and greater resilience, at application rates far below conventional biostimulants.

TECHNOLOGY · KEY SPECIFICATIONS

Mechanism	Mimics zaxinone, a natural plant-growth signalling metabolite
Potato pilot (Al Qasim)	48% higher production; 106% more large (>150 g) tubers
Cotton (Pakistan)	201% increase in total production vs untreated
Wheat / pearl millet	140% higher wheat yield; pearl-millet yield more than doubled
Rice (Taiwan)	Cut fertilizer requirement by half
Application rate	Effective far below conventional biostimulant rates

IMPACT

01

Food security

Increasing yield while reducing input use to support long-term food security.

02

Water conservation

Enhancing plant water-use efficiency to cut agricultural water consumption.

03

Soil restoration

Improving soil health through natural biological processes, not heavier chemistry.

04

Scaling from Saudi Arabia

Commercialized via namya to reach farmers in the Kingdom and global markets.