

## AI-driven microbial fertilizer development agreement forged between XtalPi and Kula Bio Forge in China and the Middle East

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XtalPi signed a strategic R&D collaboration agreement with U.S.-based Kula Bio in Boston. This partnership initiates a joint research initiative worth multi-million USD, focused on developing the next generation of microbial organic fertilizers to provide breakthrough solutions for agriculture in arid and desert regions.

By integrating artificial intelligence (AI), microbial technology, and automation, the collaboration aims to enhance agricultural productivity, improve soil health, and accelerate the global transition to green and efficient farming practices across China, the Middle East, and beyond.

Kula Bio's technology is based on research led by Harvard University professor and National Academy of Sciences member Daniel Nocera, who was recognized by TIME magazine as one of the 100 Most Influential People in the World in 2009. The company has developed microbial organic fertilizers that compete with chemical fertilizers, significantly enhancing soil fertility, increasing crop yields, and reducing environmental pollution.

The partnership will focus on overcoming soil degradation in drought-prone regions through innovative microbial fertilizers designed to transform non-traditional arable land into high-quality farmland. Under the agreement, the two companies will leverage XtalPi's globally leading AI and automation R&D platform and Kula Bio's extensive expertise in microbial technology

to co-develop innovative biofertilizers tailored for arid and desert agricultural applications. The multi-million-dollar R&D investment will be allocated to AI-driven product optimization, field trials, and market adaptation research, with initial commercialization efforts planned in China and the Middle East, expanding global arable land resources and promoting ecological resilience.

As part of the initiative, XtalPi will oversee field trials in China and the Middle East, covering at least five crop types to ensure that research outcomes translate into practical applications with strong market potential. Meanwhile, Kula Bio will utilize the technological advancements from this collaboration to accelerate global agricultural decarbonization and sustainable development.

This collaboration marks another milestone in XtalPi's strategic expansion of its AI-powered agriculture ecosystem. Following recent partnerships in AI-driven crop breeding with CyberPlantX, and intelligent seed R&D platform with Guangdong Hengjian Investment and Shouguang Vegetable Group, the Kula Bio alliance further solidifies XtalPi's commitment to modernizing agriculture through cutting-edge technologies. By leveraging AI and automation to address key challenges in agriculture, XtalPi continues to drive the industry's transformation into a tech-driven, sustainable growth model.

Kula Bio's President and COO Dr. Harrison Yoon commented: "Kula Bio's groundbreaking microbial technology is poised to create powerful synergy with XtalPi's state-of-the-art AI driven breeding and microbial design platform. Powered by advanced automation, this collaboration marks a bold step forward in accelerating innovation, expanding market reach, and addressing some of the world's most urgent sustainability challenges through next generation biological solutions."

Dr. Shuhao Wen, Chairman of XtalPi, commented: "It's an honor to forge this strategic collaboration with Kula Bio's world-class team as we accelerate large-scale deployment of next-gen green agricultural solutions in arid regions worldwide. Together, we're delivering market-defining products that overcome arable land limitations while setting new industry benchmarks for future sustainable farming practices. Our AI for Science platform will continue driving this transformation - creating scalable, climate-resilient farming systems that balance food security with environmental sustainability."