

Lomon's green leap: BIMIE redefines future of Acaricide innovation

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In a landmark moment for sustainable agriculture, Sichuan Lomon Bio Technology Co., Ltd. has officially launched BIMIE, the world's first fully registered bacterial acaricide. The unveiling, held during a high-profile virtual conference that drew over 10,000 viewers, marks the company's strategic expansion from plant growth regulators into advanced biopesticide innovation—underscoring its ambition to lead the global biologicals revolution.

At the heart of BIMIE lies its pioneering active ingredient, *Bacillus velezensis* LM-W2, formulated at 1 billion CFU/ml. Granted full regulatory registration in 2026, the product stands alone globally in its category. Developed from plant endophytes and refined through years of research since 2021, this microbial solution introduces a radically different mode of action compared to conventional chemical acaricides, offering both efficacy and ecological compatibility.

Unlike traditional chemistries, BIMIE operates through a sophisticated biological mechanism. Its microbial metabolites disrupt the digestive systems of mites, allowing active enzymes such as proteases to penetrate the bloodstream and impair immune and neurological functions. As noted by He Yueqiu of Yunnan Agricultural University, this multi-target mode of interference significantly reduces the likelihood of resistance development, while preserving beneficial organisms such as predatory mites—an essential pillar of integrated pest management.

Performance metrics reinforce BIMIE's disruptive potential. Visible effects emerge within three hours of application, with control efficacy exceeding 95 per cent within 24 hours and residual protection lasting up to 20 days. Its additional ovary-splitting action curbs pest populations at the source, making it particularly effective against targets such as *Panonychus citri* and aphids. Field trials across Sichuan and Guangxi provinces demonstrate consistent results, with sustained control rates of

85%–95 per cent over extended periods—outperforming conventional treatments like imidacloprid and acetamiprid.

From a practical standpoint, BIMIE offers strong compatibility with widely used crop protection inputs, including bifentazate and abamectin, while requiring careful avoidance of certain compounds such as fluazinam and mineral oils. Optimized for application above 25°C, the product remains functionally resilient even in cooler conditions, enhancing its versatility across diverse agro-climatic zones.

Strategically positioned for high-value crops and resistance-prone farming systems, BIMIE reflects a broader shift toward green, sustainable pest control solutions. As emphasized by Li Yi, the company’s marketing director, overcoming entrenched perceptions around the slower action of biologicals will be key—placing field demonstrations and real-world validation at the center of market adoption.

Backed by the industrial strength of Lomon Corporation Group, a global leader in plant growth regulators such as S-abscisic acid and gibberellic acid, this launch represents more than a product debut—it is a declaration of intent. With BIMIE, Sichuan Lomon Bio Technology Co. Ltd. takes a decisive step toward its vision of becoming a global leader in biological agriculture, reshaping the future of crop protection with science-led, environmentally conscious innovation.