

New Trichogramma Biofactory Reinforces São Martinho's Commitment to Sustainability, Efficiency, and Innovation

With an investment of R\$15 million, the biofactory inaugurated at the São Martinho Unit in Pradópolis (SP) produces micro-wasps for the biological control of pests, replacing chemical pesticides with natural solutions

São Martinho, one of the world's largest sugar-energy companies, has taken a major step forward in its sustainable agriculture strategy with the inauguration of its new Trichogramma Biofactory, located in Pradópolis (SP). A pioneer in the sector, this initiative strengthens the company's Integrated Total Management (MIT) approach, which combines technology, science, and environmental responsibility—reinforcing São Martinho's commitment to innovation, sustainability, and operational efficiency.

With a R\$15 million investment, the new 3,000 m² facility was designed to serve over 400,000 hectares, considering three applications per cycle. The complex is staffed by a highly qualified team, including master's and PhD-level professionals, ensuring high standards of excellence and strict quality control across the company's four units.

The core objective of the new biofactory is the large-scale production of the micro-wasp *Trichogramma galloi*, a natural enemy used in the biological control of the sugarcane borer (*Diatraea saccharalis*). This species parasitizes the pest's eggs, complementing the action of *Cotesia flavipes*—another wasp that São Martinho has been producing for over four decades to target the larval stage of the pest. By using a natural enemy to fight pests, the technology offers a sustainable alternative to chemical pesticides, minimizing impacts on soil, water, and air.

A key differentiator of this operation is the in-house production of the alternative host *Ephestia kuehniella*, which is essential for the development of *Trichogramma*. “We are the only company in Brazil with complete mastery of this entire chain—from breeding the host to field application. This strengthens São Martinho's position as a leader in applying biotechnology to agribusiness, combining science, technology, and sustainability to boost productivity, safeguard the environment, and deliver consistent financial results,” says Luís Gustavo Teixeira, São Martinho's Agricultural and Technology Director.

Aligned with the company's ESG strategy, the new biofactory reinforces São Martinho's commitment to sustainability and integrates an innovative pest management model, in which more than 85% of pest control is conducted using biological agents. This significantly reduces the use of chemical pesticides and contributes to preserving soil, water, and biodiversity. It also delivers strong operational benefits, including increased efficiency, lower costs, and greater predictability throughout the production cycle—enhancing the company's competitiveness with environmental responsibility.

With six biofactories in operation, São Martinho has cemented its leadership in the production of biological control agents such as *Cotesia flavipes*, *Beauveria bassiana*, and

Metarhizium anisopliae. These investments in biological control reinforce the company's pioneering role in building an innovative, productive, and environmentally responsible agribusiness model.