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Insectta unveils Insect Biomaterial Extraction Pilot Plant in Singapore

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Insectta, a leading company in the insect industry, has opened its new insect biomaterial extraction pilot plant. This milestone marks the beginning of Insecttaâ??s industrialisation of its patented black soldier fly (BSF) chitosan and melanin extraction process, which has already attracted the attention of industry experts and customers alike. With the successful completion of the pilot facility, the company is positioned for substantial growth, enhancing its production capacity to better serve a broader customer base, solidifying its position as a key player in the insect industry.



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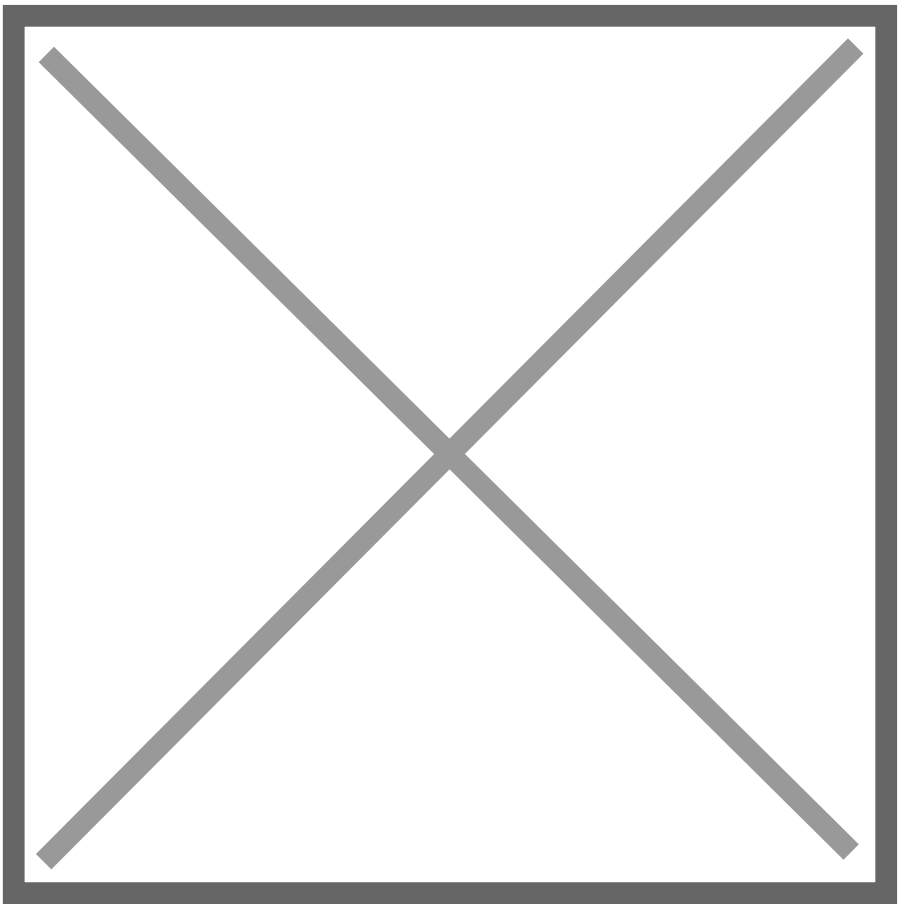
Pilot Production Facility

A grand opening ceremony attended by Insecttaâ??s collaborators and stakeholders was held on 24th Nov 2023. Located at JTC Cleantech Three, the latest development in JTC's CleanTech Park, the pilot facility allows Insectta to increase its production capacity by 30 times. Guest of Honour, Sharon Tay, Director of Food Manufacturing and Agritech at Enterprise Singapore, noted â??Insecttaâ??s technology to extract biomaterials such as chitosan and melanin from insects will enable the company to contribute greatly to new formulations of products in a wide variety of fields. Singapore hopes to stay at the forefront of these innovations, with companies like Insectta paving the way.â?



Alongside a ribbon cutting ceremony, guests were treated to tours of the pilot facility and a presentation of Insecttaâ??s product development roadmap ahead. Poised to achieve their next milestone, Chua Kai-Ning (Co-Founder and Chief Marketing Officer) said â??Weâ??re proud of the progress Insectta has made in the past 3 years and see this as the stepping stone for manufacturing and selling our biomaterials on a large scale. Weâ??re actively looking for customers and collaborators who want to harness the power of our chitosan in the personal wellness and healthcare space as well as those in the organic electronics and biomedical industries looking to tap on melaninâ??s capabilities.â❧

Insecttaâ??s proprietary and patented technology

In a market saturated with insect protein, oil, and fertilizer startups, Insectta stands out with its innovative chitosan and melanin extraction technology, poised to redefine the applications of Black Soldier Fly (BSF) derivatives. Beyond the conventional uses in insect-related products, Insectta's advancements open doors to new frontiers, particularly in the pharmaceuticals, personal wellness, and organic electronics industries. Chitosan, a versatile biomaterial celebrated for its wound healing and antioxidant properties, finds applications across diverse sectors from pharmaceuticals to personal wellness. Simultaneously, melanin, a natural pigment distinguished by its electrochemical and healing attributes, emerges as a sought-after choice for the burgeoning fields of organic electronics and biomedicine.

In line with their mission for â??insects to power our healthcare and electronics,â❧ Insectta is positioned not only to enhance the insect industryâ??s economic value but to elevate its environmental impact. Utilising their patented extraction technique, the Insectta Team has achieved another world first â?? the ability to extract water soluble melanin in unprecedented quantities. End-users can expect a cleaner, purer, chitosan and a highly functional melanin at an extremely competitive price â?? all obtained through a circular process that is not only cost-competitive but also less energy-intensive and more sustainable compared to existing extraction methodologies. Insectta's pioneering efforts underscore their commitment to sustainability, offering innovative solutions that contribute to a greener and more economically viable future for the insect industry.