B&B e-Paper No. 1.
R&D/ Industrial News about Biofertilizers and Biopesticides

Dear ICBB Participants,

Good day, The Republic of China (ROC), Taiwan has been highly committed to research and development in biopesticides and biofertilizers (B&B), and is honored to co-host the 5-year (2016-2020) "International Conference on Biofertilizers and Biopesticides (ICBB)" with the Asian Productivity Organization (APO).

We are pleased to share with all ICBB participants about the latest R&D results, news, and industrial information on B&B to promote the sustainable development of agriculture and environment in the Asia-Pacific region. B&B e-paper publishes every quarter, all comments and articles are welcome and appreciated.

Sincerely,
Agricultural Technology Research Institute (ATRI)

News from 2018.10

Silverleaf Whitefly Pesticide-free control!

Silverleaf whitefly (*Bemisia argentifolii*, also known as the sweet potato whitefly), has a wide host range over 500 plant species, including many agricultural crops such as tomato, cucumber, pumpkin, eggplant and green pepper, etc. When silverleaf whitefly feeds on tomato leaves, might cause yellowing of leaves, poor growth of plants and low yields. The silverleaf whitefly is also a notorious vector for plant diseases, gemniviruses, causing plant damages and economic losses. Insecticides are the most effective method for controlling the silverleaf whiteflies up to now, however, long-term exposure to insecticides, whitefly might evolve a resistance to insecticides. It becomes a critical issue for researchers to solve.

Bemisia argentifolii adult on a yellowing leaf.
Picture from the Hualian District Agricultural Research and Extension Station

Luckily, we find a solution. Lin *et al*. from Hualien District Agricultural Research and Extension Station Council of Agriculture, Executive Yuan, R.O.C. have spent years studying "*Isaria javanica*". After a series of studies, including laboratory tests, development of mass production techniques, formulations preparation and field tests, finally, a biopesticide for silverleaf whiteflies control was developed. Based on the GLP toxicology tests, *Isaria javanica* is safe and non-toxic to mammals, bees and beneficial insects.

Powder formulations of *Isaria javanica*.

The silverleaf whitefly was infected by *Isaria javanica*.

Pictures from the Hualian District Agricultural Research and Extension Station

Isaria javanica can be easily applied on whole plants and effectively control the silverleaf whitefly. It is also environmental friendly and can be applied on corps within the continuous harvest period without the concern of pest evolving pesticide resistance as applying insecticides. It is expected to be commercialized next year, being the first biopesticide for silverleaf whitefly control in ROC, Taiwan.

If you are interested in...

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