

## POSITIVE STORED GRAIN PEST RESULTS

- Positive study results in stored grain pest control
- Combination trial products containing Flavocide<sup>™</sup> control susceptible strains of key stored grain pests for the target period of 9 months
- Positive results of Flavocide testing in maize and barley confirm efficacy in other cereal types
- Results provide further confidence in the expected viability of Flavocide in stored grain applications
- Bio-Gene and collaborators have committed to progress discussions aimed at agreeing terms for the continued development and registration of Flavocide for the Australia/New Zealand stored grain pest market

Bio-Gene Technology Limited (ASX: BGT, 'Bio-Gene' or 'the 'Company'), an agtech development company enabling the next generation of novel insecticides, today announced positive results from the latest stored grain trial, showing efficacy over the targeted 9-month protection period.

In September 2020, Bio-Gene announced the successful identification of a lead Flavocide combination treatment to be taken to field testing as part of a 9-month efficacy study in collaboration with its research and commercial partners. The 9-month combination treatment study is stage 3 of the collaboration program. This stage of the program was designed to demonstrate the effectiveness of the combination treatment to control five of the key stored grain pests, being the Lesser grain borer, Flour beetle, Saw-toothed grain beetle, Flat grain beetle and Rice weevil.

The 3-month interim results were announced during 2021 and showed that the combination treatments were providing control of all of five key pests at this intermediate stage. Assessments were subsequently undertaken at 6 and 9 months after treatment. Results showed that the combination treatments provided complete control of non-resistant strains of all species, as well as control of resistant strains of three of the five target species, for the full 9-month testing period. Resistant strains of two of the five target species were controlled for a 3-month period, indicating that higher rates of application or alternative combination treatments would be required to control these highly resistant strains for a longer period.

Richard Jagger, CEO & MD of Bio-Gene said, "Given these results, Bio-Gene is progressing discussions on the development program including next steps towards product development and registration.

"The results of this longer-term study demonstrate the effectiveness of Flavocide in combination with other chemistry groups. The successful control of all susceptible strains of all five species tested over the 9-month study period is a great outcome. Control of resistant strains of all five species for either the full 9 months or a shorter period is very positive. Together with previous Flavocide efficacy testing results, this result forms the basis for Flavocide product label recommendations for control of the major pest species impacting grain storage."

The Department of Agriculture and Fisheries, Queensland (DAF) also recently reported on testing of Flavocide against Lesser grain borer in other grain types namely maize and barley. The results showed that Flavocide provided similar levels of control to that obtained in wheat.

Dr. Manoj Nayak, Leader of the Postharvest Grain Protection Unit within DAF, who undertook the Flavocide testing program with Bio-Gene, said: "These results show that the triple combination treatment, even at reduced rates, was very effective in containing susceptible strains of all five target pest species and resistant strains of three of



the five, for up to 9 months, and resistant strains of the other two species for up to 3 months. These data provide a solid basis for further development and commercialisation of the Flavocide technology as a part of existing stored grain pest control strategies."

Currently there is no single chemistry that controls all major pests that impact stored grain. The incidence of pest resistance is rising in Australia, and around the world. In some cases, losses of up to 70% of grain in storage have been attributed to pests<sup>1</sup>. Flavocide has the potential to create formulations that will enable control of the full range of pests including pests resistant to other classes of chemistry. The introduction of products with a novel Mode of Action, such as Flavocide, is critical for pest management in stored grain to reduce the potential of increased insecticide resistance in the future.

Approved for release by the Board of Directors.

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## **About Bio-Gene Technology Ltd**

Bio-Gene is an Australian agtech company enabling the next generation of novel insecticides. Bio-Gene's novel platform technology is based on a naturally occurring class of chemicals known as beta-triketones.

Beta-triketone compounds have demonstrated insecticidal activity (e.g., kill or knock down insects) via a novel mode of action in testing performed to date. This platform may provide multiple potential new solutions for insecticide manufacturers in applications across crop protection and storage, public health, animal health and consumer applications. The Company's aim is to develop and commercialise a broad portfolio of targeted insect control and management solutions.

Flavocide<sup>™</sup> and Qcide<sup>™</sup> are trademarks of Bio-Gene Technology Limited.

<sup>&</sup>lt;sup>1</sup> Research and markets report – grain protectants global market outlook, 2017