

## **POSITIVE RESULTS FROM SOIL ECO-TOXICITY STUDIES SUPPORT FUTURE COMMERCIALISATION OF FLAVOCIDE™**

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- **Positive results received from preliminary soil eco-toxicity studies on Flavocide™**
- **Studies investigated the effects of Flavocide on soil-based organisms**
- **Results provide further data for a global registration-enabling package and support the future commercialisation of Flavocide**

Bio-Gene Technology Limited (ASX:BGT, 'Bio-Gene' or 'the Company'), an agtech development company enabling the next generation of novel insecticides, is pleased to report positive results from preliminary soil eco-toxicity studies relating to Flavocide. These studies - undertaken with technical grade flavesone, the active constituent contained in Flavocide – positively build on the previous eco-toxicity studies performed on a range of organisms to further profile the effects of Flavocide on non-target organisms within soil-based ecosystems.

These most recent studies were performed on organisms commonly found within a soil environment inclusive of earthworms (*Eisenia foetida*) and soil-based microorganisms. The studies were designed to investigate the potential toxic effects of an acute exposure of Flavocide to earthworms and the long-term potential effects of a single exposure of Flavocide on both the carbon and nitrogen transformation activity of soil microorganisms.

Soils consist of living and non-living components which exist in complex and heterogeneous mixtures. Earthworms and microorganisms play an important role in break-down and transformation of organic matter in soils with many species contributing to different aspects of soil fertility. Any long-term interference with these organisms and associated biochemical processes could potentially interfere with nutrient cycling and this could negatively impact soil fertility and well-being.

These studies are therefore key to further profiling and understanding the potential hazards posed by products containing flavesone when released into the environment, with particular relevance to outdoor uses such as for crop protection and mosquito control.

The assessment of flavesone on earthworms involved a dose range finding study. Subject to more definitive testing the results of these studies indicated that Flavocide would be classed as 'moderately toxic' to earthworms. This classification is well within the range of currently registered insecticides and, thus, represents a positive outcome in terms of expected non-target impact assessment for registration.

The assessments of Flavocide impact upon soil microorganisms were evaluated at rates in excess of the anticipated maximum rate expected to be applied in the field. The results of these studies revealed that use of Flavocide would have no long-term impacts on either nitrogen or carbon transformation in soils.

Subject to further environmental fate studies aimed at determining the longer-term effects of Flavocide in soil and the broader environment, these preliminary data would indicate that Flavocide would likely have minimal impact on non-target soil organisms. These results will assist in determining the need for future studies to further profile the effects on soils exposed to Flavocide when used in targeted use patterns. This will assist product registrations and will also support promotion of Bio-Gene products to potential commercial partners with an interest in commercialising the company's technology.

These results will be presented to BASF and Clarke, two companies with which Bio-Gene currently has product evaluation agreements targeting potential applications in stored grain pest control and public health mosquito control.

Bio-Gene's strategic objective is to generate technology licensing fees, milestone payments and royalties by securing and owning the active ingredient registrations for the Company's novel insecticide products – Flavocide and Qcide™ and leveraging the product development and distribution capabilities of strong commercial partners to develop and launch those products into global markets. The Company is also developing intellectual property including patents and proprietary supply and manufacturing know-how, which has the potential to generate significant value.

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™ and Qcide™** are trademarks of Bio-Gene Technology Limited.