

# **JUNE 2022 QUARTERLY UPDATE**

- Bio-Gene/Clarke Mosquito Control program advancing to next phase
- Collaboration with Evergreen Garden Care to target specific market segments in Europe & ANZ
- Regulatory authorities in key markets now engaged on registration pathways
- Patent application submitted in Australia for Qcide™ use for flying insect control

Bio-Gene Technology Limited (ASX: BGT, 'Bio-Gene' or 'the Company'), an agtech development company enabling the next generation of novel insecticides, today announced an update on its activities for the quarter ending 30 June 2022 and to date.

Bio-Gene Chief Executive Officer and Managing Director, Richard Jagger said: "This last quarter has been one of continued progress on key fronts including our development programs with commercial partners; registration activity; and manufacturing requirements. We have been focusing on developing the relationships and activities with Clarke and Evergreen to ensure we are on a clear path towards product development and registration. In addition, we have been working with other companies to further test our technology in their laboratories for applications relevant to their individual expertise. During the quarter we announced the decision of BASF not to continue their participation in the Stored Grain Pest program with Flavocide™. BASF advised us that this project did not meet its current global strategic focus, and therefore could not continue their support to the program. Whilst disappointing, it should be expected that some companies will not always have a strategic alignment with Bio-Gene, which is why we always aim to have multiple companies testing our products for any given market. Currently, we are working with several other potential partners who are very well equipped to develop our technology for the global grain protection market. Whilst BASF was to be a newcomer to this market segment, these companies are already major players in this market space and have highlighted to us the value of new Modes of Action becoming available to this application. We will continue to work with these companies aimed at securing mutually beneficial collaboration arrangements."

#### **Clarke Mosquito Control Agreement**

Bio-Gene and Clarke have commenced regular project team meetings to jointly develop and register Flavocide in the USA. This followed the signing in April 2022 of a licence and development agreement aimed at commercialising Flavocide for use in professional public health mosquito control markets in the USA and Cayman Islands. Initial meetings are focussed on the next phase of designing and testing of Flavocide as an outdoor mosquito adulticide product. Bio-Gene is also working closely with Clarke's regulatory staff to ensure program alignment with USA EPA requirements for registration of active ingredient and end-use formulations.

#### **Evergreen Garden Care**

Evergreen's evaluation of Bio-Gene products has continued with a focus on Flavocide in Europe and the UK, and on Qcide in Australian and New Zealand markets. Product development and target uses reflect the differences in markets with the European programs focused on indoor and outdoor uses for flying and crawling insect control, and Evergreen ANZ focusing initially on outdoor home garden uses. Regulatory pathways for the active ingredients are now well understood with product development and end-use-product registration becoming more of a focus.

#### Flavocide grain storage project

Results from the latest stage of testing with Flavocide in grain storage have been collated and presented in a final project report to the GRDC. The residual efficacy study that was an integral part of this stage of the project successfully demonstrated the effectiveness of Flavocide combination treatments in controlling five of the key stored grain pests (Lesser grain borer, Flour beetle, Saw-toothed grain beetle, Flat grain beetle and Rice weevil) for

up to a 9-month period. These and other efficacy results would form the basis for Flavocide product label recommendations for control of the major pest species impacting grain storage. The focus will now shift to a closer consideration of the regulatory requirements for this use pattern in Australia and overseas, including the data required to support minimum residue levels (MRLs) in grain commodities. Discussions are continuing with the GRDC, and with other potential commercial partners with an interest in this market segment, with a view to further evaluating the market potential and how current collaborative programs and registration enabling studies will assist the commercialisation of Flavocide as a grain protectant.

#### **Other Commercial Partner Discussions**

Bio-Gene continues to actively engage with other potential commercial partners to promote our technology and support evaluation programs targeting uses in multiple market segments. We continue to work with companies already testing our technology and identify new companies to work with us under Material Transfer Agreements to test our products in new market applications. Our goal is to continue to create agreements like those developed with Clarke and Evergreen to open new commercial pathways for our products.

#### **Intellectual Property**

In June 2022 Bio-Gene submitted an application for a provisional patent in Australia entitled "Improved Pesticidal Compositions and Pest Control Methods". The specification relates to the use of Qcide and other  $\beta$ -diketones used in combination with a pyrethroid or pyrethrin compound for the control of flying insects. Examples included control of mosquito and fly species including resistant strains with evidence supporting synergy of these combinations.

Examination of other patent applications is continuing both in Australia and in countries around the world, and in the meantime Bio-Gene is continuing to generate data to support additional patent applications to add value to Bio-Gene and our commercial partners.

#### **Development of Active Ingredient International Registration Package**

The regulatory data requirements for registration of Qcide and Flavocide in key markets have been established through comprehensive data gap analyses undertaken by regulatory consultants. This has led to the initiation of the next phase of studies in the areas of mammalian toxicity, ecotoxicity, environmental fate and product chemistry. Contact with regulatory agencies in key target jurisdictions, including the USA, has been initiated in collaboration with our regulatory consultants and, in some cases, the assistance of our commercial partners. In particular, based on conversations with the EPA in the United States, we have made a submission for a Biochemical classification of Flavocide. This step has implications for the data requirements for registration, with the aim of streamlining this process. We expect on-going dialogue with the EPA over coming months as they review our submission.

## Manufacturing

Flavocide: The five-batch production program undertaken with Boron Molecular is now complete, with all five batches meeting target specification in terms of active ingredient level and impurity profile. As part of this project, standard operating procedures (SOP) for the manufacture of Flavocide have been fully documented, supported by detailed analysis of various stages of the process. These data are critical components of our Active Ingredient registration dossier.

Projects to further improve the economics of production of Flavocide are continuing aimed at identifying and investigating process improvements, alternative lower-cost non-core reagents, and waste recovery/recycle opportunities. This includes a project with CSIRO investigating treatment of the waste stream to recover a key reagent for re-use in an important stage of the flavesone synthesis process. This aims to reduce waste disposal

costs, but more importantly, to reduce the overall cost of raw materials to produce Flavocide, thereby improving the market competitiveness and profitability for Bio-Gene and our partners.

Qcide: Trees have re-coppiced well following the latest harvest in February with the next harvest planned for September/October 2022. Analysis of oil from the February on-farm experimentation, including another 5-batch production run, again confirmed very consistent processing conditions and oil profile that meet our established Qcide oil specification. The formal project with James Cook University (JCU) engineering is nearing completion, with the final report pending that will detail the laboratory testing program undertaken to determine optimum extraction conditions. Going forward, JCU will continue to assist on a less formal basis with on-farm experimentation relating to oil extraction improvements as well as energy efficiency evaluations aimed at production cost savings. A project with a commercial plant tissue culture service provider has been initiated to establish the superior tree lines currently being maintained at JCU Cairns, with a view to produce seedlings to improve quality and expand the current plantation area.

#### **Company Presentations**

This quarter also saw Bio-Gene represented at several important industry and scientific conferences that included:

- Pesticon AEPMA (Australian Environmental Pest Managers Association) National Conference (<u>www.aepma.com.au/conference</u>);
- Australian Grain Storage Protection Conference (<u>Grain Storage & Protection Conference 2022 (eventsair.com</u>));
   and
- International Conference on Urban Pests (<u>www.icup.org.uk</u>).

Bio-Gene also presented at the Pac Partners annual Agfood investor conference in June.

We continue to build on our social media interactions with regular communications on company activities and global issues relevant to our business development activities. These and on-going updates can be found on our social media pages:

LinkedIn: - https://au.linkedin.com/company/bio-genetechnology

• Twitter: - https://twitter.com/biogenetechltd

The Company will continue to focus on investor briefings and industry presentations over the course of the year.

### **Cash Position**

As at 30 June 2022, Bio-Gene held \$6.3 million in cash, which based on current plans, provides the Company with sufficient cash to operate well beyond 12 months.

Approved for release by the Board of Directors.

- ENDS -

#### For further information, please contact:

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### **About Bio-Gene Technology Limited**

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, consumer applications and animal health. The Company's aim is to develop and commercialise a broad portfolio of targeted insect control and management solutions, working with industry leaders across key market segments.

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

# **Appendix 4C**

# Quarterly cash flow report for entities subject to Listing Rule 4.7B

## Name of entity

Bio-Gene Technology Limited

# ABN

Quarter ended ("current quarter")

32 071 735 950

30 June 2022

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	63	467
1.2	Payments for		
	(a) research and development	(495)	(1,470)
	(b) commercialisation expenses	(135)	(377)
	(c) management administration expenses	(28)	(176)
	(d) directors' expenses	(63)	(239)
	(e) professional services	-	(60)
	(f) intellectual property	(62)	(194)
	(g) administration and corporate costs (see note 6)	(116)	(511)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	19	53
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	514
1.8	Other (provide details if material)	-	-
1.9	Net cash from / (used in) operating activities	(817)	(1,993)

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2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities		
	(b) businesses		
	(c) property, plant and equipment	(2)	(7)
	(d) investments		
	(e) intellectual property		
	(f) other non-current assets		
2.2	Proceeds from disposal of:		
	(a) entities		
	(b) businesses		
	(c) property, plant and equipment		
	(d) investments		
	(e) intellectual property		
	(f) other non-current assets		
2.3	Cash flows from loans to other entities		
2.4	Dividends received (see note 3)		
2.5	Other (provide details if material)		
2.6	Net cash from / (used in) investing activities	(2)	(7)

3.10	Net cash from / (used in) financing activities	(68)	4,409
3.9	Other (share proceeds received in advance)	-	-
3.8	Dividends paid	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.6	Repayment of borrowings	-	(75)
3.5	Proceeds from borrowings	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(68)	(235)
3.3	Proceeds from exercise of options	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	4,719
3.	Cash flows from financing activities		

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4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	7,229	3,933
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(817)	(1,993)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(2)	(7)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(68)	4,409
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	6,342	6,342

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	36	21
5.2	Call deposits	6,306	7,208
5.3	Bank overdrafts	-	-
5.4	Other (Term Deposits)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	6,342	7,229

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	198
6.2	Aggregate amount of payments to related parties and their associates included in item 2	N/A
	if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must includnation for, such payments.	e a description of, and an

Note 6.1: Director's fees paid to Directors or their related entities.

7.	Financing facilities  Note: the term "facility" includes all forms of financing arrangements available to the entity.  Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	N/A	N/A
7.2	Credit standby arrangements	N/A	N/A
7.3	Other (please specify)	N/A	N/A
7.4	Total financing facilities	N/A	N/A
7.5	Unused financing facilities available at qu	uarter end	N/A
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	817
8.2	Cash and cash equivalents at quarter end (item 4.6)	6,342
8.3	Unused finance facilities available at quarter end (item 7.5)	-
8.4	Total available funding (item 8.2 + item 8.3)	6,342
8.5	Estimated quarters of funding available (item 8.4 divided by item 8.1)	8
	Note: if the entity has reported positive net operating cash flows in item 1.9, answer item figure for the estimated quarters of funding available must be included in item 8.5.	8.5 as "N/A". Otherwise, a

If item 8.5 is less than 2 quarters, please provide answers to the following questions:

8.6.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

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Answer:			

8.6.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer:			

8.6

8.6.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer:

Note: where item 8.5 is less than 2 quarters, all of questions 8.6.1, 8.6.2 and 8.6.3 above must be answered.

#### **Compliance statement**

- This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 28 July 2022

Authorised by: The Board of Directors

(Name of body or officer authorising release - see note 4)

#### **Notes**

- 1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- 2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standard applies to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.
- 6. Net movements in GST are included in this item.
- Prior Quarter Corrections. Immaterial minor errors and reallocations of expenses from previous quarter reports are corrected on a year to date basis. Movements disclosed for the current quarter have been correctly calculated.