



BPH GLOBAL LTD
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Company Announcements Platform
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Encouraging gold and silver assays from Phase 2 seaweed cultivation

Highlights

- **Assays from sample 1 of Phase 2 Seaweed grown using seaweed cultivated in the polluted, brackish waters in Johor, Malaysia show significantly higher mineral content compared to seaweed cultivated in clean, pristine water (Phase 1)**
- **Gold Assays up to 123.16 mg/kg – over eight times the amount assayed in Phase 1**
- **Silver Assays up to 80.58mg/kg – over six times the amount assayed in Phase 1**
- **Further test work to be conducted on additional batches of Phase 2 seaweed**

The Board of BPH Global Ltd (ASX: BP8) (**Company**), is pleased to announce the latest laboratory assay results from its ongoing R&D program conducted by Temasek Innovation Holdings Pte Ltd (**TPIH**), an operating company of Temasek Polytechnic in Singapore, in collaboration with the Company's Singapore-based R&D consultant Gaia Mariculture Pte Ltd (**Gaia Mariculture**).

Managing Director Matthew Leonard said: "The significantly higher concentrations of minerals, including gold and silver, found in the first assay results from Phase 2 of our R&D program represent an exciting milestone for the Company. These initial findings support our hypothesis that seaweed cultivated in polluted seawaters contains higher mineral concentrations compared to seaweed grown in clean, pristine waters. We look forward to further investigating this hypothesis with additional seaweed batches in Phase 2 of the R&D program."

Phase 2 Work Plan and comparison to Phase 1 Work Plan results

As detailed in the Company's announcements on [21 February 2025](#) and [7 March 2025](#), Phase 1 focused on the cultivation of the seaweed species *Sesuvium Portucalastrum* in a controlled laboratory setting. The process, initiated in early December 2024 at Gaia Mariculture's Singapore facility, used clean, filtered seawater sourced from Sentosa Island—free from industrial or urban pollution and sediment.

Phase 2 is based on *Sesuvium Portucalastrum* seaweed harvested from brackish waters of Johor, Malaysia that are proximate to shipping lanes and industrial activity. The aim of Phase 2 is to test the hypothesis that seaweed absorbs higher mineral concentrations in dirty, polluted waters compared to seaweed grown in pristine waters due to the “sponge” effect. It is the Company’s view that seaweed has the potential to act like a sponge for base and precious metals in seawater.

Following the assay results from Phase 1, TPIH conducted assays on Batch 1 of Phase 2 to measure its mineral content. The testing was expanded to include a broader range of minerals. As with the Phase 1 batches, the samples in Batch 1 of Phase 2 were processed with concentrated nitric acid and hydrogen peroxide, filtered, and then diluted for analysis using Inductively Coupled Plasma–Mass Spectrometry (ICP-MS). The results are presented in Tables 1 and 2 below:

Table 1: Assay results of samples from Phase 1 (Batch 1 and 2) and Phase 2 (Batch 1) utilising ICP-MS

Metal	Phase 1 Metal Content (mg/kg)		Phase 2 Metal Content (mg/kg)
	Batch 1	Batch 2	Batch 1
Au	14.85	Not tested	123.16
Ag	2.76	12.67	80.58
Co	13.68	0.25	7.59
Ni	0.80	0.89	8.57
As	0.53	0.52	17.24
Cu	10.88	Not tested	84.33
Cd	0.31	0.00	8.89
Pb	0.93	0.61	9.95

Table 1: Additional tested metal content of Phase 2 Batch 1 utilising ICP-MS

Metal	Phase 2 Metal Content (mg/kg)
Li	15.08
Be	9.98
Mg	4202.13
Al	0
K	10625.60
Ca	2162.18
V	29.11
Cr	16.10
Mn	36.45
Fe	82.11
Cu	84.33
Zn	20.03
Ga	9.25
Rb	10.26
Sr	45.08
Mo	19.64

In	9.54
Cs	6.73
Ba	9.16
Ti	13.53
Pb	9.95
Bi	11.58

Phase 1 R&D Objectives and Findings

The primary objective of Phase 2 is to assess the mineral absorption capabilities of *Sesuvium portucalastrum* seaweed grown in polluted waters near shipping lanes and onshore industrial sites. Significant assay results included:

- Gold Assays up to 123.16 mg/kg – over eight times the amount assayed in Batch 1 of Phase 1.
- Silver Assays up to 80.58mg/kg – over six times the amount assayed in Batch 2 of Phase 1.
- Copper Assays up to 84.33mg/kg – almost eight times the amount assayed in Batch 1 of Phase 1.

The analysis of assay results from Batch 1 of Phase 2 supports the following hypotheses: (i) *Sesuvium portucalastrum* appears to be an effective absorber of minerals, including gold, silver, and copper; and (ii) seaweed absorbs higher concentrations of minerals when cultivated in polluted waters compared to those grown in pristine waters.

Next Steps

Building on the initial assays of Batch 1, TPIH will conduct further assays on additional batches from the Phase 2 harvest of *Sesuvium portucalastrum* sourced from Johor, Malaysia. This will allow the Company to further test its hypothesis that seaweed absorbs higher concentrations of minerals in polluted waters than in pristine waters, due to the 'sponge' effect.

During Phase 1, TPIH commenced work on techniques for the extraction of minerals from *Sesuvium portucalastrum* seaweed. This research work will continue throughout Phase 2 of the Company's R&D program.

Further updates

The Company will provide further updates regarding the Phase 2 cultivation and assays cycle and associated research and development.

This announcement has been authorised by the Board of Directors.

For further information, please visit our website at www.bp8global.com or contact:

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Appendix 1: Disclosure Table providing key details of assay results

Activity	Description
Cultivation & Harvest Site:	The biomass samples of <i>Sesuvium portucalastrum</i> seaweed were harvested from the Straits Of Johor coastline, nearshore.
Cultivation Date:	The harvested seaweed was naturally occurring in the area (Johor, Malaysia)
Harvest Date:	14:00pm on 24 March 2025
Post harvest storage pending transport to TPIH:	The samples were stored in 3 separate large low density polyethylene bags, making up a total of more than 5kg in weight.
Mode and duration of transport from harvest site to TPIH:	The bagged samples were transported by vehicle to the testing facility at TPIH and arrived at 16:58pm on 24 March 2025..
Moisture content in seaweed on arrival at TPIH:	86.0%
Processing method and Assay equipment:	<p>The seaweeds were left to air-dry overnight (~16 hours) to remove surface water. A small sample was taken for moisture and metal content determination. The remainder, some of which will be sampled as further batches for assay testing, (approximately 3kg) were then mass grinded and laid out on pans for oven drying at 70°C for 1 week (25 Mar-1 Apr 2025). Seaweeds which were not processed immediately were stored in the cold room at 4 degrees Celsius.</p> <p>The samples from Batch 1 that were allocated to assaying for metal content were selected on a random basis. These selected samples were digested using concentrated nitric acid and hydrogen peroxide. Between 30-35g of these samples, randomly selected, were dried, and subsequently one (1)g of the dried samples, again randomly selected, were used for metal quantification.</p>

	<p>The one (1)g of the dried samples were then filtered and diluted to facilitate metal determination using Inductively Coupled Plasma– Mass Spectrometry (ICP-MS). The one (1)g of the dried seaweed samples were digested using 15 ml of concentrated nitric acid at 80°C for two (2) hours. Five (5) ml of hydrogen peroxide (15 %) was then added, and the mixture was maintained at 80°C for another two (2) hours. The mixture was then cooled to room temperature and filtered. The filtrate was diluted to enable metal determination using Inductively Coupled Plasma – Mass Spectrometry (ICP-MS).</p> <p>Digestion of samples using nitric acid and hydrogen peroxide is a commonly used procedure for metal extraction from seaweed biomasses. ICP-MP is the standard instrumentation used for metal detection and quantification.</p>
Processing date:	25 March 2025