RB MILESTONE GROUP

Plant Health Care PLC

(AIM: PHC)

September 19, 2018

Price (Sept 18, 2018):	**£0.184**
Beta:	**-0.46**
Price/Sales:	**4.14x**
Debt/Equity Ratio:	**0.08**
Listed Exchange:	**AIM**

Source: Yahoo Finance

Recent News

30-Jul-2018: Usage of PHC's Harpin αβ in sugarcane crop in Brazil, sold under the brand name H2Copla, generated revenues of $400,000 since its launch in February 2018. PHC now plans to launch Harpin αβ in coffee during the 2019/2020 growing season.

16-Jul-2018: In February 2018, PHC launched Harpin αβ in sugarcane in Brazil, supported by demonstration plot yield increase of 20% or more. Awarded contract for a Harpin αβ product to be used on corn in the US, with significant first sales expected in H2 2018.

30-May-2018: Granted a total of 1,860,104 options to Dr. Christopher Richards and 467,538 options to Dr. Richard Webb.

10-Apr-2018: Revenues increased by 21% YOY to $7.7 million for the year ended December 31, 2017, due to strong sales growth in South Africa and Spain, 104% and 60%, respectively. The Company's gross margin was healthy at 62%.

27-Feb-2018: Raised £5.0 million (USD $6.7 million) through the issuance of an aggregate 25 million new ordinary shares.

12-Dec-2017: Signed an agreement with a fifth major agricultural/seed company for evaluation of its Innatus 3G platform.

Fully Diluted Shares Outstanding:	184.85 million
Common shares Outstanding:	172.82 million
Market Cap:	£31.79 million
52 Week High:	£0.28
52 Week Low:	£0.135

Note: All $ symbols represent US dollars (USD), unless otherwise specified. Share price & market cap are in GBp.

Prominent Plant Biologicals Provider

Plant Health Care PLC (the "Company", "Plant Health Care", "PHC") is a US-based company, providing proprietary agricultural technology solutions and biological products to enhance plant health and yields. The Company has two business segments, Commercial and New Technology. The Commercial business sells patented biological products across geographic areas such as the Americas, Europe and South Africa, and is generating revenues of over $7 million per year. The New Technology business focuses on the development of proprietary biological solutions that can be both complementary to or substitutes for conventional agrochemicals (pesticides). The Company has successfully created three proprietary biological platforms (Innatus™ 3G, Y-Max 3G and T-Rex 3G), which are under various stages of evaluation by its agricultural partners.

Investment Rationale

Commercial Business grew 21% Year-Over-Year in 2017

The Company's Commercial business, which sells patented biological products for enriched crop performance, is growing rapidly. The Commercial business generated $7.7 million revenue for FY 2017 (ending December 31, 2017, representing a 21% Y-o-Y increase from FY 2016. Specifically, the sale of Harpin αβ products, which represented 63% of the Company's total sales in 2017, has grown at a 23% CAGR between FY2013 and FY2017. At present, the Company's products are sold in more than 14 countries and is poised for expansion into more countries in 2018. The Company's Harpin αβ products have increased the yield of US corn and soybeans by 3-5%. Further, demonstration field trials of Harpin αβ in sugarcane fields have resulted in average yield increases of over 20%. Harpin αβ is also sold in fruit and vegetable crops such as citrus, tomatoes, peppers and potatoes, resulting in significant yield increases. The effectiveness of the Company's products in yield improvement and disease resistance in crop plants is helping drive its sales globally. In February 2018, the Company launched its Harpin αβ product in the promising Brazilian sugarcane market and generated $400,000 in revenue from February 2018 to June 2018. Brazil has 10 million hectares of sugarcane crop and is the world's largest producer of sugarcane. The Company has potential to gain 2.5 - 5% market share in the Brazilian sugarcane market over the next four years. The Company was awarded a contract in the US and also expects to launch Harpin αβ for US corn seed treatment and anticipates initial sales in H2-2018. Further, the Company also expects to launch its Harpin product for coffee in Brazil during the 2019/2020 growing season. With these recent favorable events, the Company expects 30% Y-o-Y revenue growth in FY2018.

Successful Partnerships should help New Technology Business growth

The Company has signed agreements with nine agricultural/seed companies, including all the major, global industry leaders, for evaluation of its PRE*tec* platforms. These evaluations include assessing the Innatus 3G platform for usage along with their agrochemical products (pesticides) for improved disease resistance and yield enhancements in soybean and corn. Past field trials conducted by and on behalf of the Company between 2013 and 2016 have shown that the application of Innatus 3G to crops, after treatment with a conventional agrochemical, resulted in superior pest protection and crop yields. The field trials in soybean and corn crops conducted by the Company in 2013-2016 resulted in an average yield increase of approximately 7.6 Bu/ac (Bushels/acre) in corn and 1.8 Bu/ac in soybean. Such successful field trials strengthen the commercialization prospects of the Company's Innatus 3G platform.

Experienced Management Team

Plant Health Care's board of Directors and management team has strong knowledge and expertise in the plant biologicals and agrochemical industry. Dr. Christopher Richards, the Executive Chairman and Interim Chief Executive Officer of the Company, has more than 30 years of experience in various life science and agrochemical companies. He has held senior-level positions in companies such as Syngenta, Arysta LifeScience and Dechra Pharmaceuticals. Prior to joining Plant Health Care, Dr. Richards was CEO of Arysta LifeScience. Mr. Michael J. Higgins, a Senior Independent Director of the Company, has more than ten years of experience in advising small and mid-sized publicly traded companies. Prior to joining Plant Health Care, he served as a senior advisor at KPMG. Further, Dr. Richard H. Webb, an Executive Director of the Company, has significant experience in handling laboratory discovery and field development of pesticides. He has held various senior level positions at companies including ICI and Zeneca Agrochemicals. Finally, Mr. William M. Lewis, a Non-executive Director of the Company, has significant experience in the agrochemical business. He has held senior roles at companies such as Syngenta Crop Protection, Arysta LifeScience and Zeneca/ICI.

Biologicals industry growth augments future revenue prospects

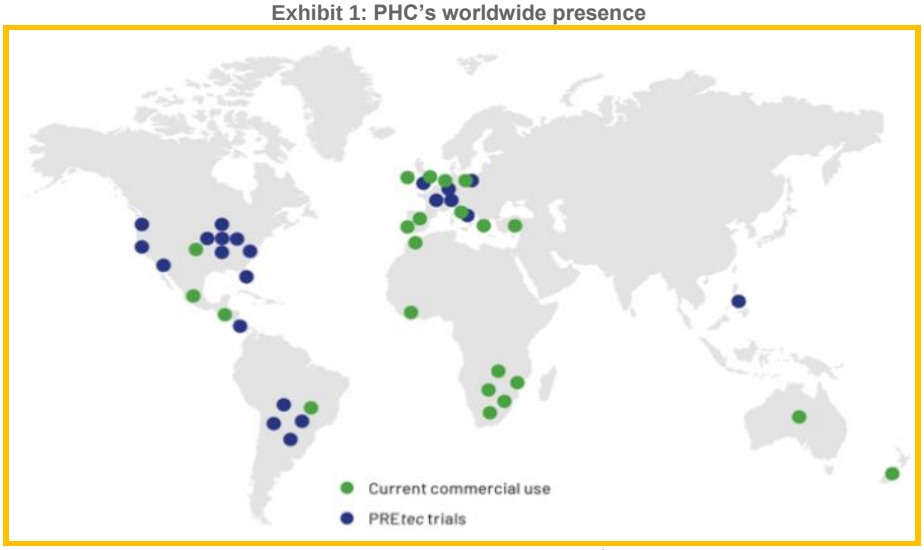
Plant Health Care's operations are well supported by favorable growth trends in the plant biologicals industry. According to Dunham Trimmer, a market research firm, the global biologicals market is projected to grow from $5.7 billion in 2016 to $9.1 billion by 2020, representing an attractive 12% CAGR. Factors such as increasing global population, declining arable land per person, falling yields and increasing pest resistance to conventional agrochemicals (pesticides) are driving demand of plant biologicals. Further, biologicals are now well positioned to gain market share from conventional agrochemicals. Biologicals provide more benefits than conventional agrochemical solutions because they are non-toxic and are more environmentally friendly. Biologicals can also provide a superior pest control in plants than agrochemicals. Such advantages may drive significant adoption for biologicals among crop growers.

Company Overview

Business

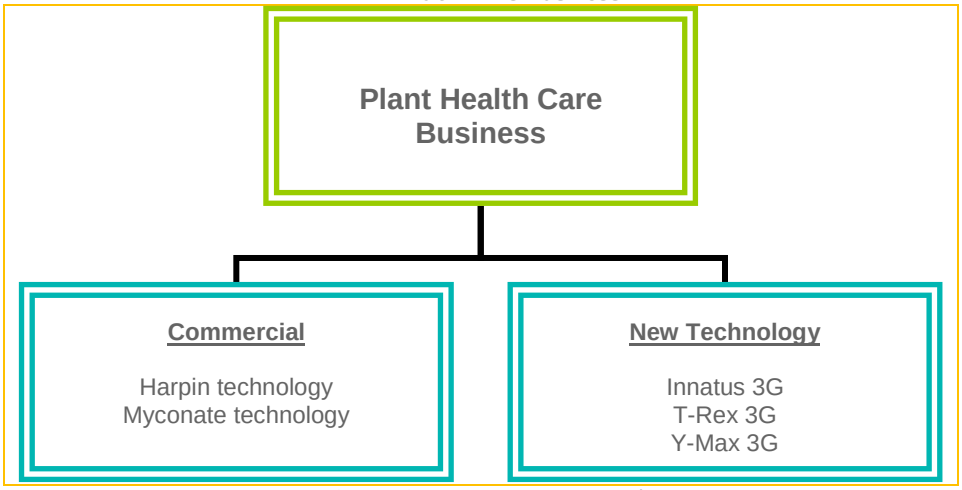
Plant Health Care PLC provides patented biological products and solutions to global agricultural markets. The Company's biological products are offered to improve the yield and vigor of various field and specialty crops. PHC's biological products are environmentally friendly and hence are well-positioned to take advantage of the long-term growth trends for natural agricultural solutions. The Company's products have been in use or undergoing trials at numerous locations across the world as seen in Exhibit 1. PHC also has a dedicated research and development program that continues to develop innovative agricultural solutions in crop health, disease resistance and establish potential synergies with various agrochemical companies. Exhibit 2 shows an overview of the company's business segments and product offerings. As discussed earlier, the Company operates in two strategic business segments namely, Commercial and New Technology.

Exhibit 1: PHC's worldwide presence



Source: Company Investor Presentation

Exhibit 2: PHC Business



Source: Company Investor Presentation

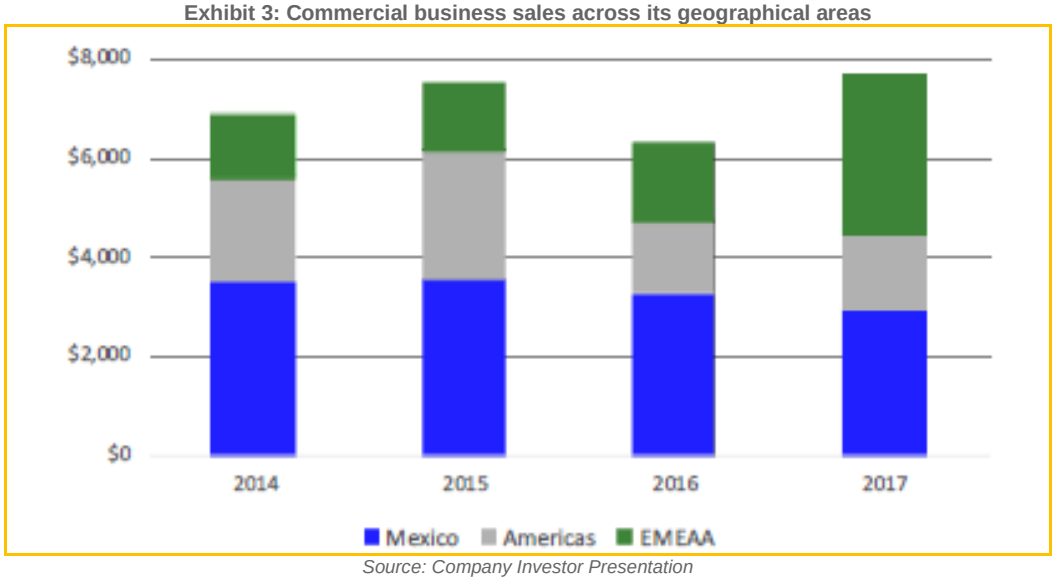
Commercial Business - Recent growth shows plenty of promise

The Company's Commercial business sells patented biological products, including biofertilizers and biostimulants. The Company also distributes third party complementary products for improved crop performance in Mexico. The Company's biological products are known to enhance the plant's natural physiological process, resulting in superior yield and plant health. PHC's proprietary biological products fall under two major technologies, Harpin technology and Myconate technology. The Company sells N-Hibit®, ProAct® and Employ® products under the Harpin technology and Myconate® product under the Myconate technology. The Company's products are currently sold across three primary geographical areas, namely the Americas, Mexico and EMEA.

For the year ended December 2017, the Company's Commercial business generated $7.7 million in revenue, an increase of 21%, compared to $6.3 million in 2016. The Company's proprietary biological products accounted for 69% of the sales in 2017, compared to 59% in 2016. The Company is currently on track to achieve full year revenue expectations, which would represent a 30% Y-O-Y revenue growth in FY2018.

Exhibit 3 shows sales growth from 2014 to 2017 across its geographical areas.

Exhibit 3: Commercial business sales across its geographical areas



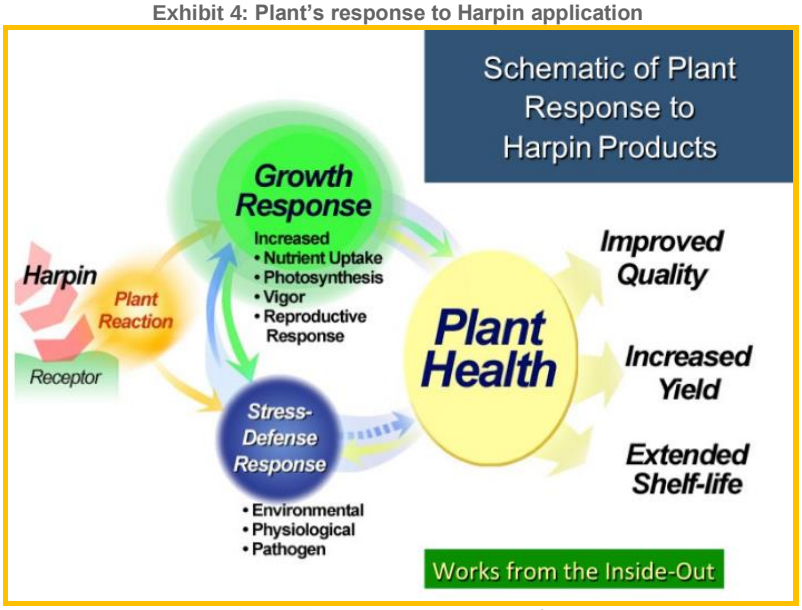
Source: Company Investor Presentation

Harpin technology - an effective biological solution for crop vigor using Harpin αβ

Harpin proteins are produced naturally by certain bacterial plant pathogens. Harpin αβ is a recombinant protein developed by the Company. On contact with a crop plant, Harpin αβ elicits the plant's natural growth and immune responses such as Hypersensitivity Response (HR) and System Acquired Response (SAR). HR prevents the spread of pathogen infection in plants, while SAR creates a plant-wide resistance to pathogen attack.

The Company's Harpin αβ protein activates the self-defense mechanisms in plants for improved crop performance. Through a Harpin αβ product application, the plant's growth and immune responses (HR and SAR) are activated artificially. The plant responds by increasing its photosynthesis and generates extra energy to resist the mimicked pathogen attack. This extra energy is further utilized in reducing stress levels and improving crop yields. Harpin αβ application therefore results in improved yield, crop quality and extended shelf life. Further, since Harpin αβ does not interact directly with pathogens, the pathogens are not expected to develop resistance to the Harpin αβ application, unlike conventional pesticides. Harpin αβ can be used in crop plants either as a seed treatment or as a foliar application. Exhibit 4 describes the Harpin technology and plant response to the application of Harpin technology.

Exhibit 4: Plant's response to Harpin application



Source: Company Investor Presentation

Harpin αβ products

PHC sells three Harpin αβ products namely N-Hibit (seed treatment), ProAct and Employ (foliar application).

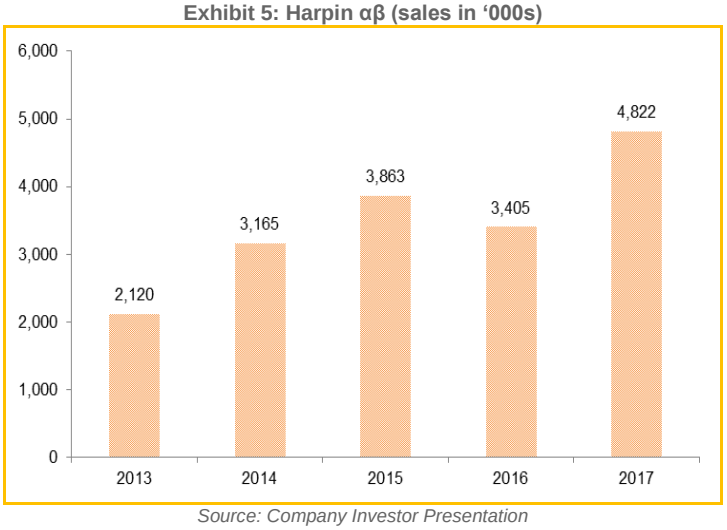
- **N-Hibit HX-209** - N-Hibit HX-209 is a seed treatment product that can be applied before planting. N-Hibit works by activating the plant's internal defense mechanisms. N-Hibit usage in row crops such as corn, soybeans and cotton has resulted in improved plant health, fewer nematodes and strong yield.
- **ProAct** - ProAct is a foliar treatment product for row crops. ProAct activates the SAR response and improves self-defense mechanisms in plants. Numerous studies and trials have shown that ProAct usage in plants reduced nematode problems and improved crop yield.
- **Employ** - Employ is a foliar treatment product for specialty crops. The usage of Employ also results in increased yield, extended shelf life, reduced nematode production and better plant recovery.

Harpin αβ sales grew at an attractive 23% CAGR between 2013 and 2017

In 2017, the sale of PHC's Harpin αβ products generated $4.8 million in revenue and accounted for approximately 63% of the total revenue. Harpin αβ product sales have grown at an attractive 23% CAGR between 2013 and 2017. Exhibit 5 shows Harpin product sales between 2013 and 2017. PHC's Harpin αβ products are sold in more than 14 countries and have treated vast acres of row and specialty crop fields to date (in excess of 12 million acres). Harpin αβ usage has demonstrated yield increases of approximately 3-5% in US corn and soybeans. Further, use of Harpin αβ has increased on table grapes, rice, potatoes and citrus fruits. These improved yield results and disease protection are driving Harpin αβ adoption globally. PHC is also developing Harpin αβ for the treatment of various other crops. The Company aims to expand its market share by developing Harpin-based products for new crops and by entering into new markets.

Recently, in 2018, after three years of extensive trials, Harpin αβ was launched in Brazil for sugarcane treatment. Field trials conducted in both ratoon cane (cane that grows back after harvest) and newly planted cane demonstrated positive yield increases. For instance, single applications of a low dose (100 g per Ha) Harpin αβ at six to eight weeks post-harvest in ratoon cane resulted in significant yield increase of 10-29%. The Company views the Brazilian sugarcane market as a high revenue potential segment. Further, the Company has been awarded a contract to supply Harpin αβ for corn seed treatment in the US. The Company now expects first sales in the second half of 2018. In addition, the Company also plans to launch Harpin αβ in coffee during the 2019/2020 growing season in Brazil. The Company is currently working on testing the product for use in coffee in Brazil. The Company owns and licenses patent rights covering a variety of claims. Patents covering the Harpin αβ products will continue in force through 2027.

Exhibit 5: Harpin αβ (sales in '000s)

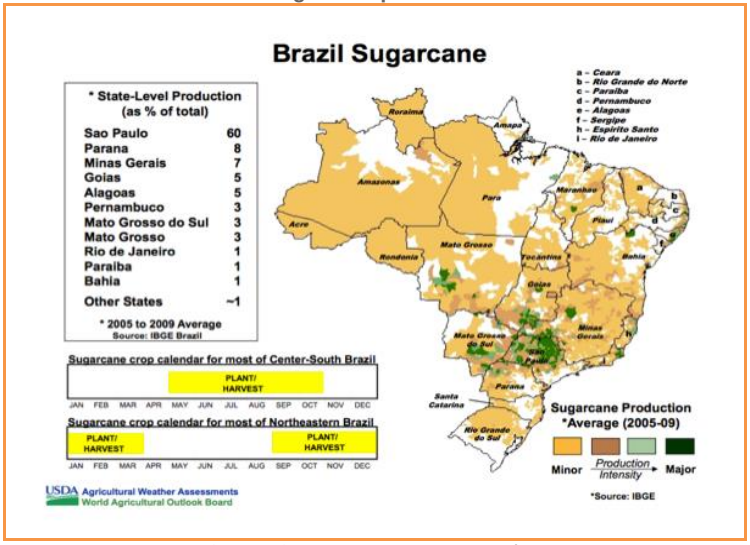


Source: Company Investor Presentation

Brazil Sugarcane Market - High revenue potential for Harpin αβ application

To quantify the business opportunity, we now discuss the Brazilian sugarcane market. Brazil is the world's largest producer of sugarcane and has 10 million hectares (ha) of sugarcane fields. Further, estimates reveal that approximately 60% of the country's sugarcane production is in Sao Paulo as shown in Exhibit 6. In February 2018, PHC launched Harpin αβ (H2Copla) for sugarcane treatment in Brazil, through its distributor Coplacana. Coplacana is a leading sugarcane co-operative in Sao Paulo, with more than 50% of the state's agrochemical market share. This presents a lucrative distribution opportunity for PHC to gain market share in the Sao Paulo sugarcane market. H2Copla sales generated revenue of $400,000 since the launch of the product in February 2018 to June 2018. The initial customer feedback has been strong, and the Company expects significant demand growth in H2 2018 and the following years. Based on these promising initial sales, there is potential for PHC to gain a 2.5% market share (or $5 million in revenue) over a four-year period.

Exhibit 6: Sugarcane production in Brazil



Source: Company Investor Presentation

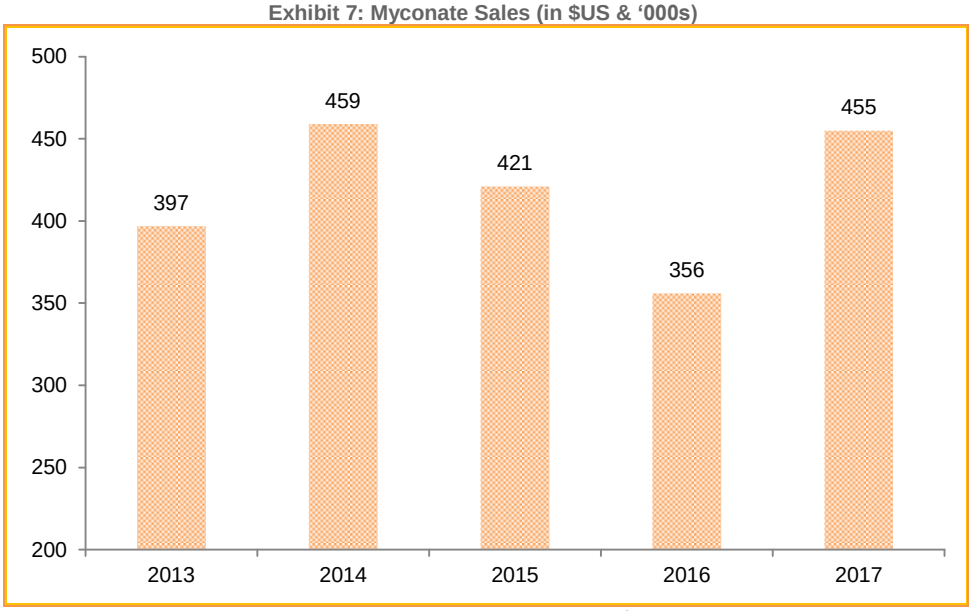
Myconate technology – ensures well developed Mycorrhiza

Mycorrhiza is a naturally occurring symbiotic association between a plant and a set of soil organisms termed as mycorrhizal fungi (or Mycorrhizae). Mycorrhizae colonize the plant's root system and transport essential soil nutrients and water needed for the plant's growth. A well-developed mycorrhizal system increases the surface area of roots available for plant growth. This could extract more soil nutrients and water from the soil, which the plant could not access normally, resulting in superior plant health and yield. PHC's Myconate technology is a proven yield enriching technology, which uses stimulants to strengthen the plant's mycorrhizal system.

Myconate

PHC sells Myconate (Mycorrhizal stimulant) product under its Myconate technology. PHC's Myconate is a soil enrichment product that produces enhanced mycorrhizal network in plants. Myconate contains isoflavone formononetin, a naturally occurring compound, which stimulates colonization of Vesicular-Arbuscular Mycorrhizal (VAM) fungi (a root symbiont) in the plant's root system. The application of Myconate produces healthier, high-yielding plants even in dry/poor soil conditions. Myconate product sales were $455,000 for FY2017, representing 28% Y-o-Y increase compared to the same period in 2016. Exhibit 7 shows Myconate product sales between 2013 and 2017. Patents covering Myconate will continue to expire through 2031. The Myconate product can be used in a wide variety of agricultural (cereals, cotton, corn, peanut, rice, sorghum, soybean, sunflower) and vegetable crops (carrots, tomato, lettuce, beans, cucurbits, peas, onion, pepper) either as a seed treatment or a soil treatment.

Exhibit 7: Myconate Sales (in $US & '000s)



Source: Company Investor Presentation

New Technology

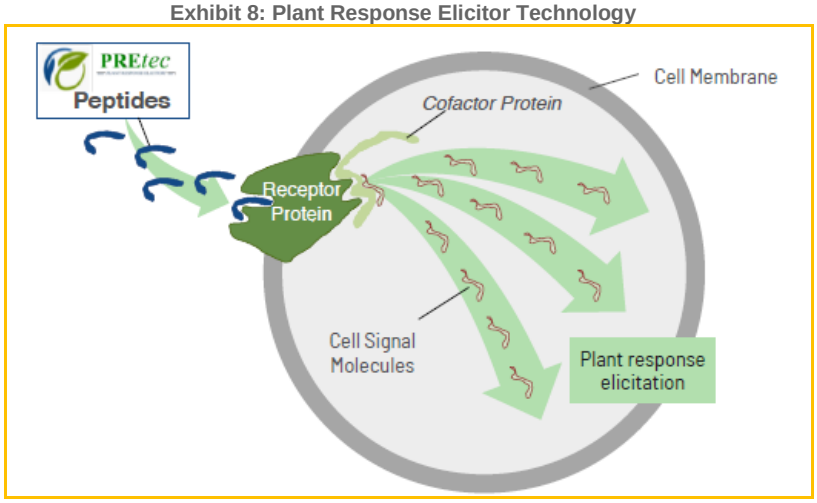
PHC's New Technology is focused on the development and licensing of its proprietary Plant Response Elicitor technology (PRE*tec*) platforms. The Company's PRE*tec* platforms increase crop plant yield and aid in disease resistance. The Company has successfully delivered three proprietary 3G (third generation-small peptides) PRE*tec* platforms, namely Innatus 3G, T-Rex 3G and Y-Max 3G, for evaluation by its partners. The Company intends to convert these platforms into products by collaborating with major agricultural companies for further development and commercialization. As of April 2018, evaluation agreements have been signed with nine companies (including five major agricultural/seed companies) for field trials. The Company has recently focused its resources on Brazil, evaluating its products in field trials and advanced technical evaluation. Outside of the Brazilian field trials, in July 2018, the Company reported that three of its partners have reported positive results in a range of more than 10 crops, uses and regions. These partners and the Company are now discussing trials of PRE*tec* across a variety of specialty and broad-acre crops. The Company's peptide platforms can be used for a wide range of crops such as arable crops (corn and soybean) and specialty crops (fruits and vegetables). Further, the Company's 4G (fourth generation) peptide platforms are in early stages of development today. These platforms are applications of DNA or RNA forms of PRE*tec* in agriculture and plant breeding.

PRE*tec* - A Promising Agricultural Technology

Plant Response Elicitor technology (PRE*tec*) is a bio-rational (non-toxic) agricultural technology that selectively activates the growth and self-defense mechanisms in crop plants. PRE*tec* protects crop plants from abiotic stresses such as drought and diseases during their growing season. A PRE*tec* peptide platform consists of a combination of related peptides (short proteins or chains of amino acids linked by a peptide bond) that mimic the naturally occurring larger proteins to which plants respond defensively. These peptides, on contact with the plant's cell membrane, function as a signal molecule and elicit a specific defensive response determined by its molecular structure. The Company has identified and developed selective lead peptides with wide agronomic benefits such as yield enhancements, pest resistance and crop quality. The Company's PRE*tec* peptides are less toxic and rapidly bio-degradable than conventional agrochemicals. In addition, the Company has also gained significant expertise in modifying the peptide sequences for improved biological performance.

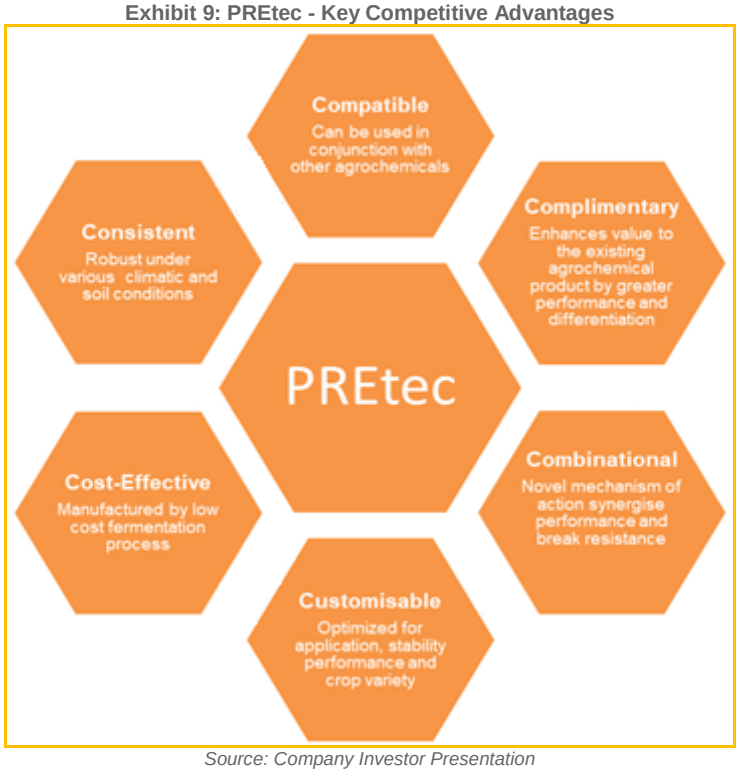
Exhibit 8 displays the PRE*tec* technology mechanism and Exhibit 9 shows some key competitive advantages of PRE*tec* platforms.

Exhibit 8: Plant Response Elicitor Technology



Source: Company Investor Presentation

Exhibit 9: PREtec - Key Competitive Advantages

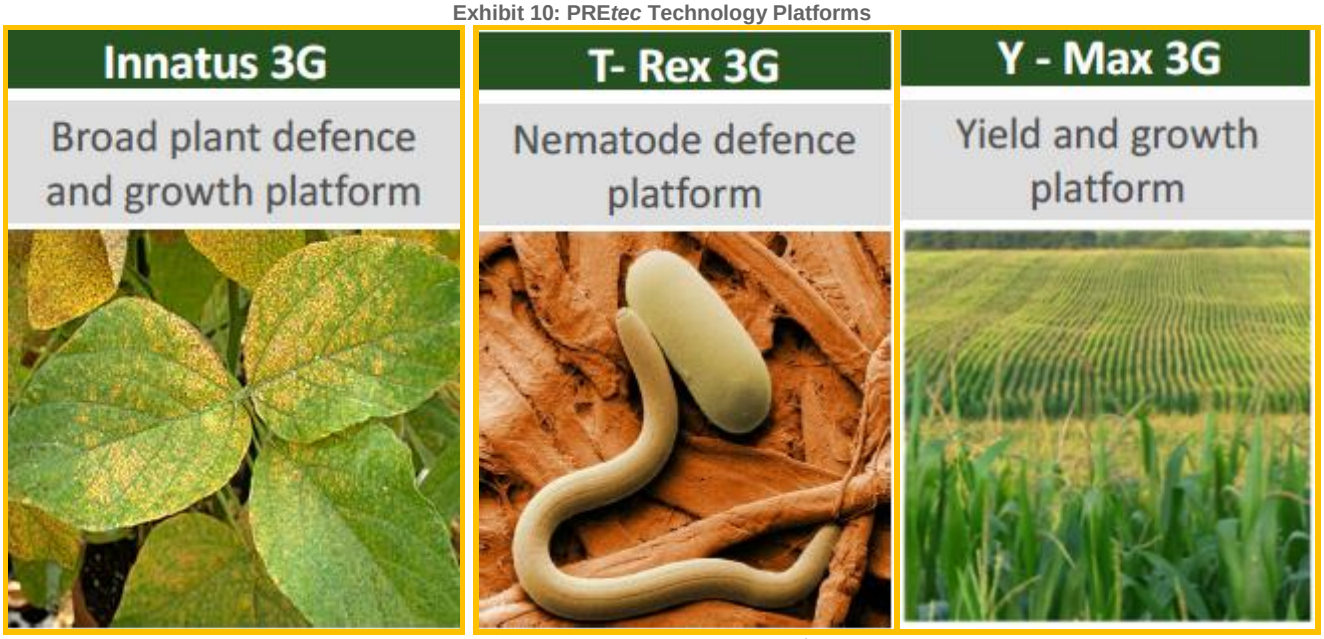


Source: Company Investor Presentation

PHC proprietary PRE*tec* platforms

Exhibit 10 and 11 shows the company's three proprietary PRE*tec* platforms (Innatus 3G, T-Rex 3G and Y-Max 3G), the lead peptides in each platform and their performance focus. The Company has identified eight lead peptides for various disease resistance and crop yield benefits. The Company is now also working on multiple peptide variants for enhanced crop performance.

Exhibit 10: PRE*tec* Technology Platforms



Source: Company Investor Presentation

Exhibit 11: New Technology Platforms

3G platform	Performance focus	Lead peptides (synthetic → fermented product)	Partner trials started
Innatus 3G	Disease resistance, vigor, quality, yield (Combat fungicide resistance in row crops and enhance yield and quality)	PHC398 ~>PHC279 PHC296 ~>PHC863 PHC958 ~>PHC404 PHC180 ~>PHC148	2015
T-Rex 3G	Nematode, yield	PHC176 ~>PHC032 PHC097 ~>PHC949	2016
Y-Max 3G	Growth, roots, yield	PHC353 ~>PHC414 PHC326 ~>PHC535	2016

Source: Company Investor Presentation

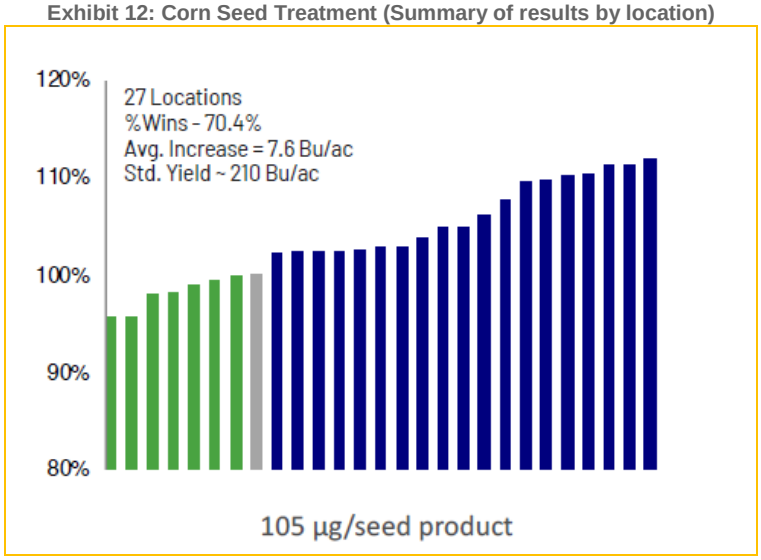
Innatus 3G

Innatus 3G is a bio pesticide platform, which provides a range of crop protection and yield improvement benefits in plants. Innatus 3G peptides (PHC279, PHC863, PHC404, and PHC148) work by eliciting the Hypersensitive Response in treated plants. These peptides are compatible with conventional agrochemicals (fungicides, nematicides and pesticides) and can be applied as either foliar or seed treatment.

Initial field trials of Innatus 3G showed attractive crop yield increases

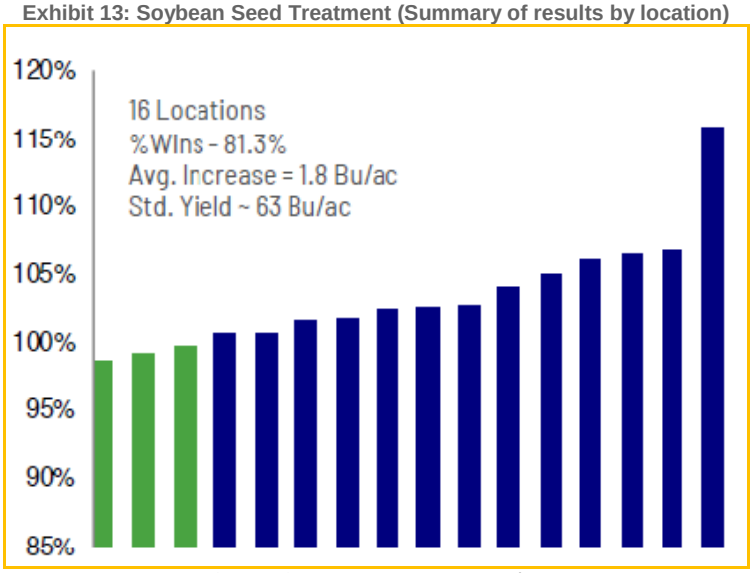
The initial field trials of Innatus 3G conducted by PHC and by university groups on corn and soybean seeds showed significant agronomic benefits of improved disease resistance and strong yield increases in corn and soy. The field trials were conducted between 2013 and 2016 across several locations in the US Midwest. 3G peptide treatments resulted in an average yield increase of approximately 7.6 Bu/ac (Bushels/acre) in corn and 1.8 Bu/ac in soybean respectively. The corn and soybean seeds were first treated with a conventional treatment (fungicides, nematicides, biologicals and insecticides) and then over treated with Innatus 3G peptides. The results also demonstrated that the Innatus 3G peptides enhance the efficacy of the applied agrochemical in disease control and yield protection. Exhibit 12 and Exhibit 13 show the summary of field trial results of corn seed treatment and soybean seed treatments (each bar represents one trial location) respectively.

Exhibit 12: Corn Seed Treatment (Summary of results by location)



Source: Company Investor Presentation

Exhibit 13: Soybean Seed Treatment (Summary of results by location)

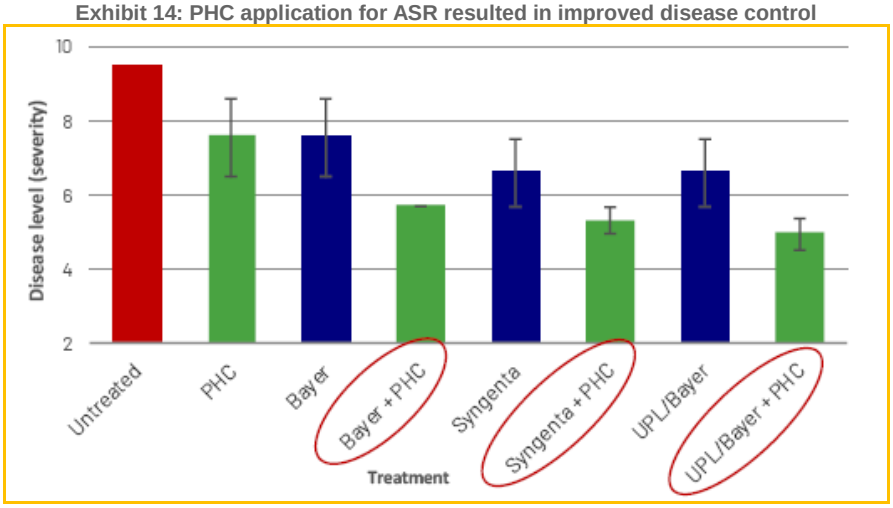


Source: Company Investor Presentation

The Asian Soybean Rust (ASR) Control opportunity- a $1.7 billion fungicide market

Asian Soybean Rust (an endemic disease) has been a major problem for Brazilian soybean growers. Conventionally, fungicides are applied to control ASR. In 2016, Brazilian farmers spent $1.7 billion on soybean fungicides. The application of conventional fungicides often does not provide complete control due to ASR now developing resistance to such fungicides. The Company's lead peptide PHC279, on the other hand, also works on ASR that is resistant to conventional fungicides, and aids in improved disease control and yield. Field trials of the PHC279 lead peptide, in combination with conventional fungicides for ASR, have shown to increase disease control than conventional fungicide application alone. Exhibit 14 details the severity of ASR disease level for various biologicals mixtures. Further, PHC279 peptide application also resulted in increased crop yield in laboratory tests.

Exhibit 14: PHC application for ASR resulted in improved disease control

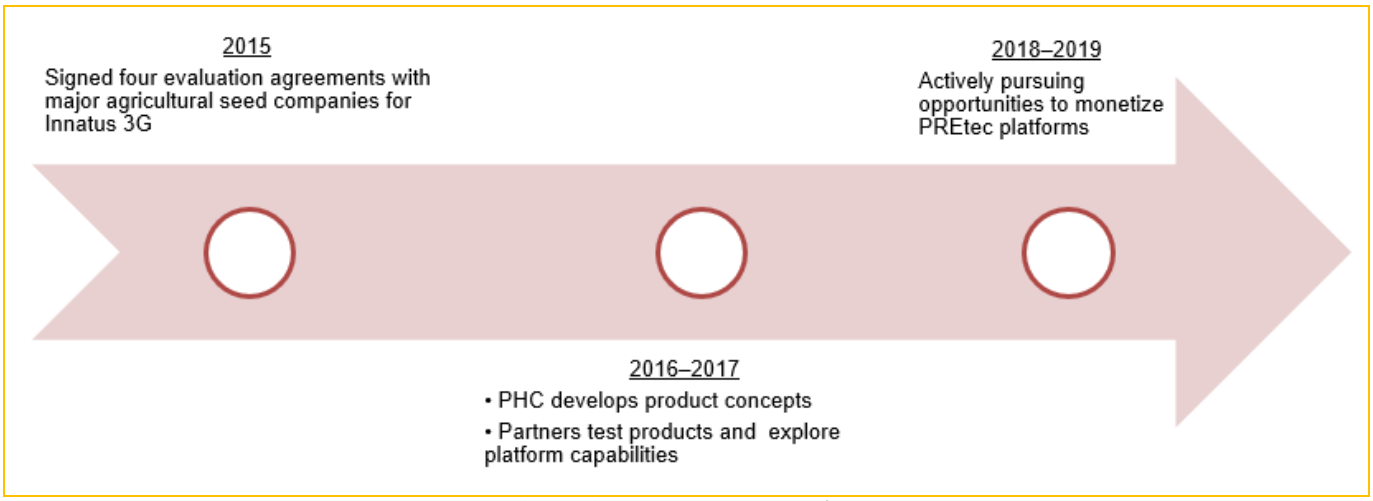


Source: Company Investor Presentation

Field trials of Innatus 3G during the Brazilian 2017/2018 soybean crop season revealed average soybean yield increases of 6-7%

During the 2017/2018 soybean crop season, the Innatus 3G platform (lead peptide PHC279) was under advanced technical evaluation and field testing by the top four Brazilian fungicide market leaders, which control more than 80% of the Brazilian market share. Further, the Company has also teamed up with EMPRAPA, an esteemed Brazilian Government agricultural research institution, to evaluate its Innatus 3G platform. The field testing during the 2017/18 season showed conventional fungicides worked well in disease control, in contrast to previous years. Therefore, the Company's Innatus 3G added only limited additional value to disease control. However, the results revealed average yield increases of approximately 6-7% in Innatus 3G treated soybeans, even at low application rates. The Company is in discussion with its partners to further undertake field trials during the next soybean crop season. The Company also expects to test Innatus 3G platforms for both disease management and yield control benefits. Exhibits 15 and 16 detail the licensing timeline of PHC and the development timeline of the Innatus 3G PHC279 lead peptide respectively.

Exhibit 15: Licensing Timeline



Source: Company Investor Presentation

Exhibit 16: PHC lead peptide PHC279 development milestones

	2016	2017	2018	Before 2021
Efficacy	Lab/Greenhouse	Evaluation field trials	Development field trials	Commercial sales
Ability to make	Synthesis	Bench-top fermentation	Pilot production	Commercial production
Regulatory		Fast track strategy	Submit package	Approval
Technology license	Competitive arena		In discussion with partners on plans for further trials in South American soybeans	

Completed	In Progress	Planned

Source: Company Investor Presentation and Press release on July 16, 2018

T-Rex 3G

T-Rex 3G is a nematode defense platform. Nematodes are parasitic organisms that feed on the plant's root cells. Nematodes cause damage to the plant's root system and affect the plant's overall health and vigor. T-Rex 3G controls the nematode occurrence by stimulating the plant's self-defense mechanisms. Trials of T-Rex 3G on soybean plants conducted in 2016 showed reduced nematode problems.

Y-Max 3G

Y-Max 3G is a bio-stimulant platform (yield and growth platform). Field trials of the Y-Max 3G platform on corn and soybeans showed that Y-Max 3G peptides improve the biomass and yield of the crop plants.

2018-2019 Milestones

PHC expects to generate significant cash flow from its Commercial business by expanding its market share in its existing markets and entering new markets. In its New Technology business, the Company continues to have high confidence in the value of PRE*tec* and is actively pursuing opportunities to monetise it..

Exhibit 17: Milestones 2018-2019

Commercial	• Deliver market expectations for revenue and cash
	• Generate cash from commercial operations and reduce cash burn
New Technology	• Actively pursuing opportunities to monetise PRE*tec* platforms
The Company	• Generate cash from commercial operations and reduce cash burn. Cash positive in 2020.

Source: Company Investor Presentation

Company Timeline & Key Events

Exhibit 18 below shows the reverse chronological timeline of the evolution of Plant Health Care PLC, summarizing some key annual events for the Company since 2015.

Exhibit 18: Timeline summarizing significant annual events since 2015

Dates	Events
30-July-18	PHC's Harpin αβ in sugarcane sales in Brazil generated revenue of $400,000 since its launch in February 2018. Plans to launch Harpin αβ in coffee during the 2019/2020 growing season.
16-July-18	In February 2018, PHC launched Harpin αβ in sugarcane in Brazil, supported by average demonstration plot yield increase of 20% or more. Awarded contract for a Harpin αβ product to be used on corn in the USA, with significant first sales expected in H2 2018. Results of field trials of Innatus 3G, added to chemical sprays for the control of Asian Soybean Rust (ASR) in Brazil indicated that Innatus 3G increased soybean yield by 6-7%, even at low application rates.
30-May-18	Granted a total of 1,860,104 options to Dr. Christopher Richards and 467,538 options to Dr. Richard Webb.
10-April-18	Revenues increased by 21% YOY to $7.7 million for the year ended December 31, 2017, due to strong sales growth in South Africa and Spain (up 104% and 60% respectively). Gross margin was stable at 62%.
27-Feb-18	Raised £5.0 million through issuance of an aggregate 25 million new ordinary shares.
12-Dec-17	Signed an agreement with a fifth major agricultural/seed company for evaluation of its Innatus 3G platform.
18-Sep-17	Revenues increased by 8% to $3.1 million for the six months ended June 30, 2017 compared to $2.9 million for the same period in 2016, due to strong sales growth in EMEAA. Sales for this region increased by 202% (231% respectively in constant currency). Gross margin was stable at 58%.
12-Jul-17	Granted options for a total of 925,789 ordinary shares to Dr. Richard Webb, Executive Director.
10-Apr-17	Revenues decreased by 16% YOY to $6.3 million for the year ended December 31, 2016, due to lower sales in the US. Sales in the US were down by $1.1 million. Gross margin was stable at 62%.
18-Jan-17	Extended the terms of evaluation contracts with its four Innatus 3G evaluation partners to 2018.
14-Dec-16	Established four new distribution arrangements for its commercial plant health products.
14-Sep-16	Revenues decreased by 9% to $2.9 million for the six months ended June 30, 2016, compared to $3.2 million for the same period in 2015. Gross margin decreased to 59% from 63% due to lower sales.
16-Aug-16	Raised $7.6 million through issuance of an aggregate 75,967,796 new ordinary shares.
8-Apr-16	Revenues increased by 9% YOY to $7.5 million for the year ended December 31, 2015, due to a $1.5 million increase in Harpin αβ product sales. Gross margin increased to 62% in 2015 from 51% in 2014 due to lower manufacturing costs of Harpin αβ products.
02-Dec-15	Signed a new agreement with Sym-Agro Inc, (a leading biologicals company based in California) for the distribution of its Employ® and Myconate products in the western US agricultural markets.
25-Sep-15	Signed its third and fourth agreements with major agricultural industry companies for evaluation of its Innatus 3G platform.
14-Sep-15	Revenues marginally decreased by 3% to $3.2 million for the six months ended June 30, 2015 compared to $3.3 million for the same period in 2014. Gross margin increased to 63% from 53% primarily due to higher pricing as well as lower cost of goods.

Source: Company filings

Industry Overview

The global agricultural industry is experiencing a major technological shift. Factors such as rapid population growth, declining arable land per person, falling crop yields and climate change have created the need for innovative products and solutions to increase crop yield and crop vitality. Besides the presence of conventional agricultural solutions, such as the usage of agrochemicals, genetic modification of seeds and plant breeding, Biologicals are growingly seen as effective agricultural solutions for improved crop performance. Biological solutions, in some cases, have even surpassed the benefits provided by conventional agricultural solutions. Hence, the adoption of plant biologicals is growing significantly.

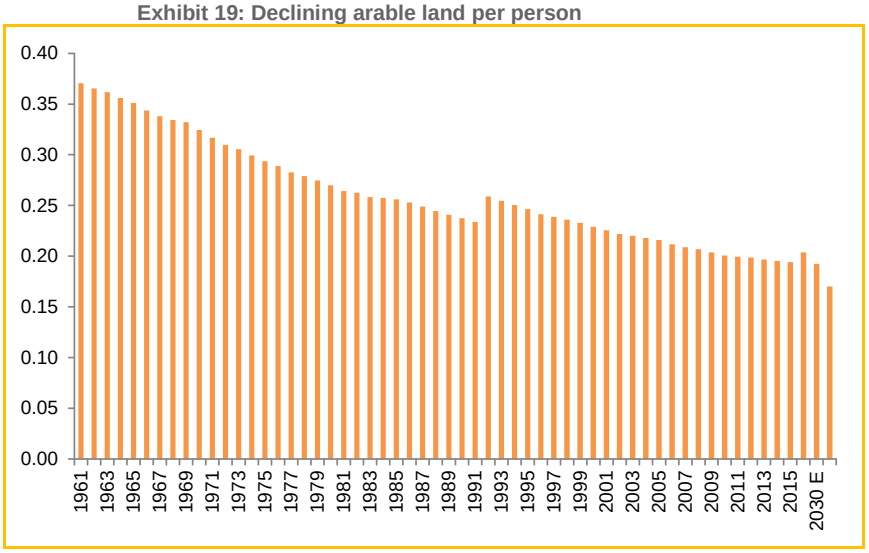
Biologicals – A natural agricultural solution for improved crop performance

Biologicals for agriculture are naturally occurring or synthetically derived compounds extracted from microorganisms, beneficial insects, organic matter and others. Biologicals are known to positively influence the plant's growth and self-defense mechanisms for efficient pest management and higher productivity. Further, biologicals have a non-toxic mode of action, and hence are environment friendly compared to conventional agrochemicals (pesticides such as fungicides, insecticides etc.). Since the concerns due to pesticide residue in food produce are growing globally, biologicals are well positioned to gain market share from conventional agrochemicals in the global agricultural market. Bio stimulants (plant growth biologicals) and Bio pesticides (pest resistant biologicals) are the major categories of agricultural biologicals. Currently, biologicals are used in the production of a wide variety of agricultural crops, including horticulture crops (fruits and vegetables) and row crops (corn, soybeans, wheat and others).

Growing population and declining arable land per person

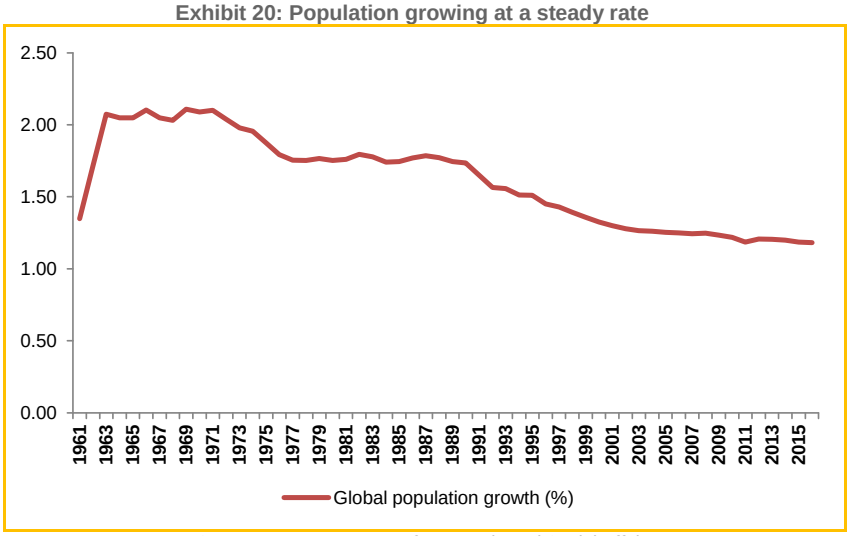
According to "World Population Prospects: The 2017 Revision by UN Department of Economic and Social Affairs", the world population is estimated to grow to 9.8 billion in 2050 and 11.2 billion in 2100, from 7.6 billion, as of 21 June 2017. Further, the arable land per person has been falling over the years and is projected to reach approximately 0.17 hectare per person in 2050. Exhibit 19 and 20 show the global population annual growth rates and declining arable land per person over the years.

Exhibit 19: Declining arable land per person



Source: UN Department of Economic and Social Affairs

Exhibit 20: Population growing at a steady rate



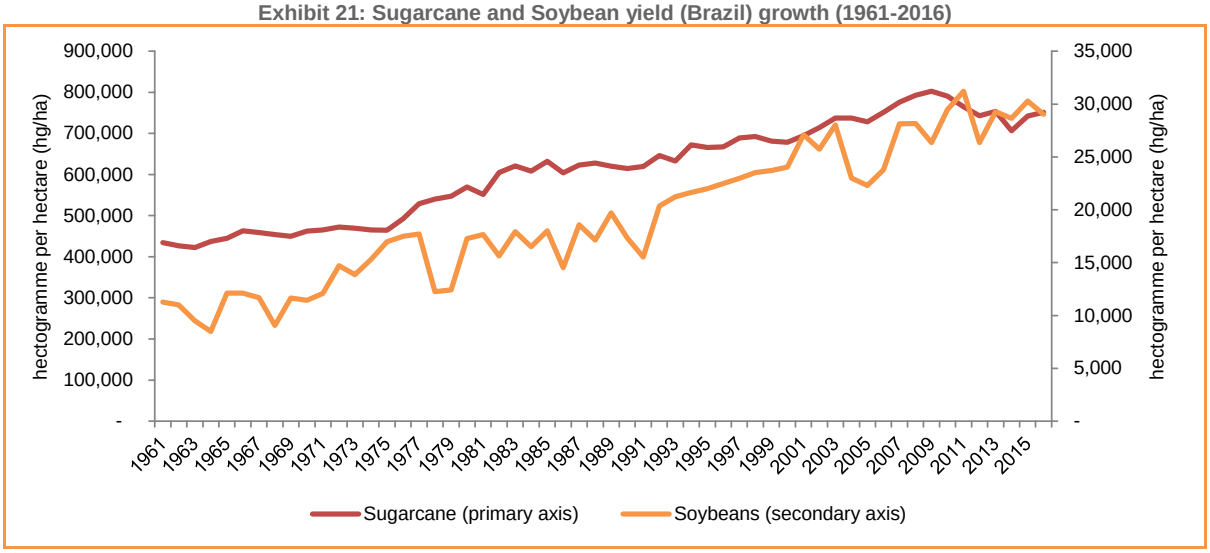
Source: UN Department of Economic and Social Affairs

Increasing Pest Resistance to Conventional Agrochemicals should drive demand for Biologicals

Increasing pesticide resistance by plant pathogens has been a major problem in crop management. Pesticides have played a major role in increasing crop yields over the years. Much of the average yield increases over the last four decades are predominantly due to active pest control through the use of pesticides, rather than the increase in yield potentials; according to research papers *Oerke, E. C. 2006. Crop losses to pests and Cassman, K. G. 1999. Ecological intensification of cereal production systems: yield potential, soil quality, and precision agriculture.* However the yield growth is slowing, and in some cases (for certain crops or region), yields have started to decline. Such fluctuations in crop yields could be related to cases where the pesticides are now deemed less effective or ineffective. Increasing pesticide resistance by plant pathogens is one of the major factors leading to such inefficiencies in agrochemicals usage. Biologicals are widely seen as innovative solutions to such agricultural problems. The usage of biologicals, along with agrochemicals, could also improve the efficacy of the conventional agrochemical application. Further, the pests are also not expected to develop resistance to biologicals applications due to their differing mode of action compared to conventional agrochemicals.

Exhibit 21 shows the trends in sugarcane and soybean yields in Brazil. Fluctuations due to plant pathogens and weather are notable issues.

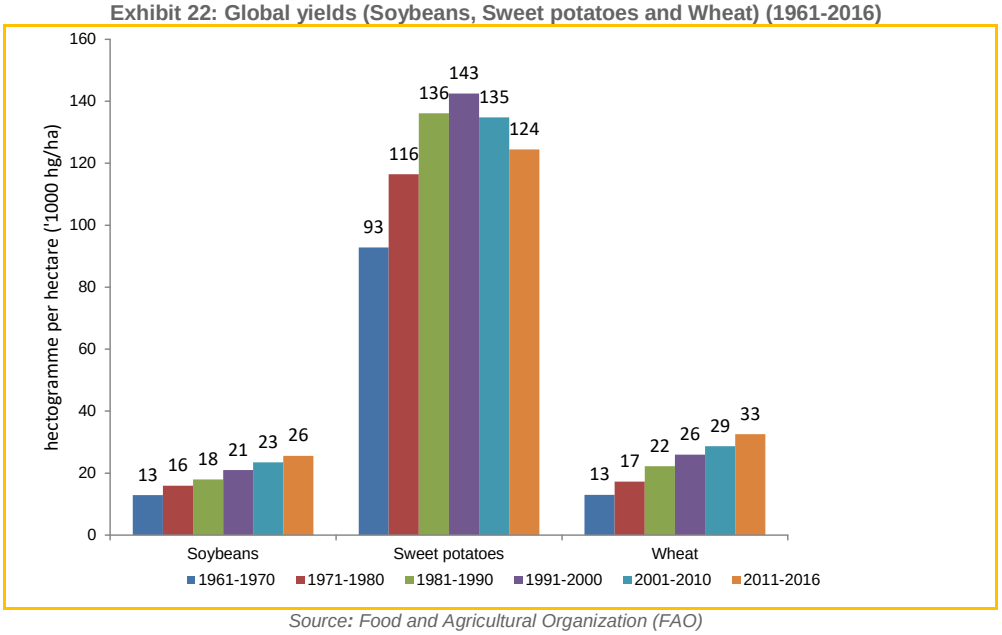
Exhibit 21: Sugarcane and Soybean yield (Brazil) growth (1961-2016)



Source: Food and Agricultural Organization (FAO)

Exhibit 22 shows that the average yields of sweet potatoes during the 2001-2010 and 2011-2016 period has declined, compared to average yields during the period 1991-2000, perhaps due to new agrochemical resistant varieties of plant pathogens.

Exhibit 22: Global yields (Soybeans, Sweet potatoes and Wheat) (1961-2016)

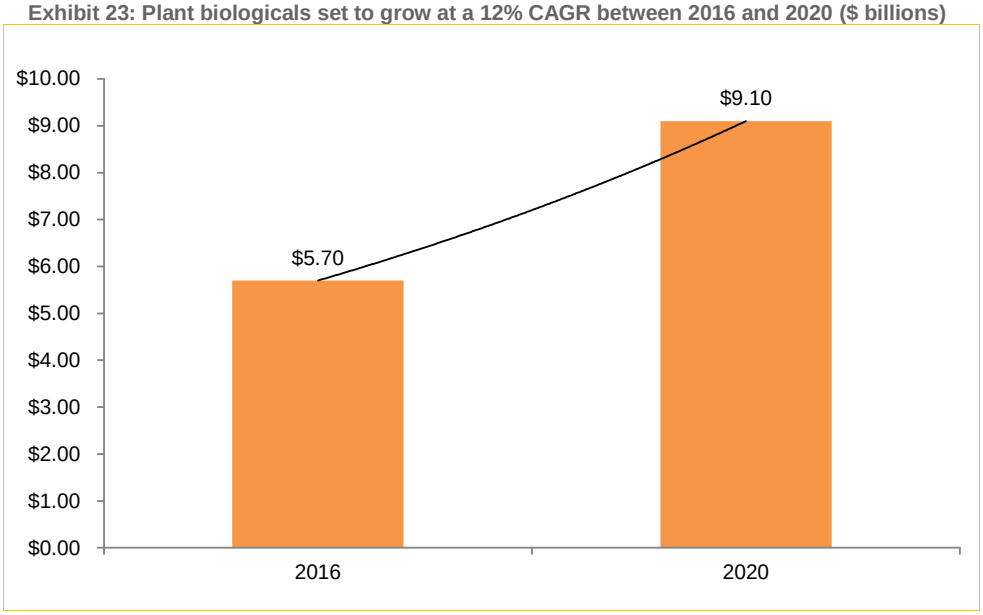


Source: Food and Agricultural Organization (FAO)

Biologicals for agriculture- estimated to grow at an attractive 12% CAGR between 2016 and 2020

According to Dunham Trimmer, a biological market intelligence company, the global demand for biologicals is estimated to grow to $9.1 billion by 2020, from $5.7 billion in 2016, representing an attractive 12% CAGR**.** In 2016, horticulture crops accounted for approximately 80% of the biologicals sales, while, biologicals in row crops are also expected to grow significantly in the years to come, specifically with applications in corn and soybeans.

Exhibit 23: Plant biologicals set to grow at a 12% CAGR between 2016 and 2020 ($ billions)



Source: Company Investor Presentation

Plant Health Care – Comparables

We now discuss Plant Health Care's major comparables. We have selected the following companies: Eden Research PLC, Isagro S.p.A and Tessenderlo Group as Plant Health Care PLC's comparables based on their products. We begin with a brief description of the companies, followed by some key financial/valuation metrics (seen in Exhibit 24). GBP denotes the British pound while GBp denotes the British pence.

Based on the EV/Revenue metric, PHC looks attractive compared to its closest competitor Eden Research PLC (based on market capitalization). PHC currently trades at 3.65x EV/Revenue compared to Eden Research PLC at 11.61x EV/Revenue. Further, PHC trades at a slight premium compared to its large market cap competitors (Isagro S.p.A and Tessenderlo Group), perhaps primarily due to their conventional agrochemical offerings. PHC's future growth and expansion opportunities in the form of New Technology commercialization may imply its slightly higher valuation to its more mature competitors (Isagro S.p.A and Tessenderlo Group).

- **Eden Research PLC (LON: EDEN) ("Eden") –** Eden is an AIM-listed agricultural company involved in the production and sale of natural bioactive products for higher crop yield and crop protection. Eden has expertise in terpenes, encapsulation and formulation technologies. Eden Research manufactures products for foliar disease control, soil pests and post-harvest applications. The Company has a market capitalization of GBP22.65 million.
- **Isagro S.p.A (LON: OESX) ("Isagro") –** Isagro is an Italian-based manufacturer of biological products for crop protection (agropharmaceuticals). Isagro is involved in the research, production and distribution of agropharmaceuticals, and also in the development of new molecules with low environmental impact. Isagro is listed on the London Stock Exchange. Isagro has a presence in countries such as Australia, South Africa, Mexico and Chile. Isagro has a market capitalization of GBP48.56 million.
- **Tessenderlo Group (EBR: TESB) ("Tessenderlo") –** Tessenderlo is a Belgium based diversified industrial group operating three business segments namely the Agro segment, Bio-valorization segment and Industrialization segment. Tessenderlo manufactures markets and sells crop nutrients and crop protection products through its Agro segment. Tessenderlo's plant nutrient products are primarily focused on ensuring crop vitality. Tessenderlo is headquartered in Belgium and sells its products worldwide. Tessenderlo has a market capitalization of GBP1.27 billion

Exhibit 24 shows some key financial/valuation metrics of Eden Research PLC, Isagro S.p.A, Tessenderlo Group and Plant Health Care PLC.

Exhibit 24: Financial/Valuation metrics of comparables (as of Aug 14, 2018)

Companies	Market Cap (million)	Price	EV (million)	EV/Revenue	1-year price chart
Eden Research PLC (LON: EDEN)	£22.65	£0.109	£21.79	11.61x	
Isagro S.p.A (LON: 0ESX)	£48.56	£1.46	£101.93	0.77x	
Tessenderlo Group (EBR: TESB)	£1,270	£29.43	£1,350	0.91x	
Plant Health Care PLC (AIM: PHC)	**£25.84**	**£0.149**	**£28.04**	**3.65x**	

Source: Yahoo! Finance and Financial Times

Company SWOT Analysis

Strengths

Growing Commercial business

The Company's Commercial business is generating revenues through the sale of its Harpin and Myconate products. Harpin sales grew 42% YOY and Myconate sales grew 28% YOY in 2017.

Partnership with leading agricultural/seed companies

PHC has established partnership agreements with five top agricultural/seed companies, including the top four market leaders of the Brazilian fungicide market. Partnership with such top agricultural companies and potential licensing of its 3G peptide platforms potential should help PHC gain market share in the growing biologicals market space.

Patented product lines

The Company's products are patent protected. Patents covering Harpin αβ products will continue to expire through 2027. Patents covering Myconate will continue to expire through 2031.

Qualified and Experienced Board of Directors and Management Team

The Company's management team has significant expertise in plant science technology and agrochemicals. The Company's Executive Chairman and Interim Chief Executive Officer, Dr. Christopher Richards has more than 30 years of experience in plant technology and life science companies. This experienced management team should successfully help the Company achieve its future goals.

Weakness

Generating loss since inception

Plant Health Care has a history of operating losses since inception. The Company raises funds from the capital markets from time to time to meet its working capital expenditures. The Company's loss for the year attributable to the equity holders of the parent company was ($5.4) million during the year ended December 31, 2017. This is mainly due to the fact the Company is still growing the scale of its business and expects to commercialize its products in the near future.

Opportunities

Brazil Sugarcane market – Harpin application

Brazil has 10 million hectares (ha) of sugarcane crop, with a 60% concentration in the state of Sao Paulo. Demonstration field trials of the Company's Harpin αβ product revealed average yield increases of over 20%. There is a potential for PHC to gain a 2.5% market share in the Brazil Sugarcane agrochemical market over the next four years.

Soybean ASR control

Soybean production in Brazil was estimated at $30 billion in 2016. ASR has been devastating for soybean growers. ASR also has developed resistance against conventional fungicide application, making it ineffective for complete ASR control. Brazilian farmers spent $1.7 billion on fungicides in 2016. PHC's Innatus 3G platform demonstrated significant fungus resistance in soybeans during the initial field trials by the Company. ASR is also not expected to develop resistance to Innatus 3G due to the latter's mode of action. PHC, through its Innatus 3G platform, is in discussion with partners on plans for further trials in South American soybeans in the 2018/19 season.

Threats

Competition

Currently, numerous plant biological companies operate across the world. According to Forbes, the shorter development timeline and development costs of biological technologies over synthetic chemicals are pushing more companies into the plant biologicals market. Forbes estimates reveal that over 500 companies operate in the Plant Biologicals segment, which constitute only 5% of the global market for products used in crop cultivation.

Financial Performance

The Company follows January to December as its financial year. We begin by analyzing the Company's cash burn followed by the financial statements. All financial amounts are in US dollars unless specified.

Exhibit 25 shows the cash burn analysis of Plant Health Care PLC. We have considered operating cash flows for cash burn analysis as other activities are not part of its core business. The Company's average cash burn per month stood at $598,000 with an average survival period of 3.74 months. The Company's investments, cash and cash equivalents stood at $3.9 million as of December 31, 2017. Further, on February 27, 2018, the Company successfully raised $6.7 million through equity issuance. Based on the current cash and cash equivalents in hand, the Company is confident that it has sufficient liquidity to fund its working capital needs through the fiscal year 2018 (based upon its 2018 revenue and operating expense projections). As of June 30, 2018, the Company reported that it had cash reserves of $6.1 million.

Exhibit 25: Cash burn analysis (in $'000s)

Period/ Amount (in '000)	Six months ended June 2015	Six months ended Dec 2015	Six months ended June 2016	Six months ended Dec 2016	Six months ended June 2017	Six months ended Dec 2017	AVG
Net operating cash flow	(3,828)	(3,684)	(5,054)	(4,092)	(3,155)	(1,722)	(3,589)
Net investing cash flow	2,798	1,518	4,462	(2,666)	1,211	1,385	1,451
Net financing cash flow	(6)	141	(5)	9,741	(5)	(5)	1,644
Cash position (Six months end)	2,768	948	1,169	4,727	2,179	1,175	2,161
Burn Rate per month	(638)	(614)	(842)	(682)	(526)	(287)	(598)
Survival period (in months)	4.34	1.54	1.39	6.93	4.14	4.09	3.74

Source: RBMG Research

Exhibit 26 shows the Company's income statements for the year ended December 31, 2017 and 2016. The Company generated $7.7 million revenue in 2017, a 21% increase compared to $6.3 million in 2016. This increase was driven by a strong sales growth in the Rest of World segment, up 100% to $3.2 million from $1.6 million in 2016, partially offset by a 11% decrease in revenue from the Mexican segment ($2.9 million in 2017 from $3.2 million in 2016). Gross profits increased by 22% to $4.7 million for the year ended December 2017, compared to $3.9 million for the same period in 2016. Gross margins were steady at 61.6% in 2017, a marginal 0.1% increase. Operating loss narrowed to $5.8 million in 2017, a 49% decrease compared to 2016. This was due to lower administrative expenses in 2017, which fell by approximately 75% compared to 2016. Excluding the exceptional costs incurred in 2016 relating to a potential US listing ($1.2 million) and a non-cash decrease in the value of loans (loss of $1.5 million in 2016 compared to a gain of $1.3 million in 2017), cash operating expenses fell by approximately 5% in 2017, compared to 2016. Further, net loss for the year attributable to the equity holders of the Company in 2017 narrowed to $5.4 million, a 51% decrease compared to $11.2 million in 2016.

Exhibit 26: Income Statements for year ended December 31, 2017 and 2016 (in $'000s)

Particulars	For the year ended December 31, 2017	For the year ended December 31, 2016	Y-o-Y (%)
Revenue	$7,685	$6,329	21%
Cost of sales	($2,953)	($2,436)	21%
Gross profit	$4,732	$3,893	22%
Research and development expenses	($5,127)	($4,485)	14%
Business development expenses	($623)	($954)	-35%
Sales and marketing expenses	($2,995)	($2,518)	19%
Administrative expenses	($1,788)	($7,286)	-75%
Operating loss	($5,801)	($11,350)	-49%
Finance income	$87	$52	67%
Finance expense	($2)	($2)	0%
Loss before tax	($5,716)	($11,300)	-49%
Income tax credit	$262	$83	216%
Loss for the year attributable to the equity holders of the parent company	($5,454)	($11,217)	-51%
Other comprehensive income **Items which will or may be reclassified to profit or loss:**			
Exchange difference on translation of foreign operations	($1,282)	$1,393	-192%
Total comprehensive loss for the year attributable to the equity holders of the parent company	($6,736)	($9,824)	-31%
Basic and diluted loss per share	($0.04)	($0.11)	-64%

Source: Company filings

Exhibit 27 displays the balance sheets, as of December 31, 2017 and December 31, 2016. As of December 31, 2017, the Company's cash and cash equivalents stood at $1.2 million compared to $4.7 million on December 31, 2016. The decrease was primarily due to no issuance of shares in the year ended December 31, 2017, compared to a $9.7 million equity issuance in the year ended December 31, 2016. Working capital decreased $5.3 million as of December 31, 2017 compared to December 31, 2016.

Exhibit 27: Balance Sheets as of December 31, 2017, and December 31, 2016 (in $'000s)

	As at December 31, 2017	As at December 31, 2016	Y-o-Y (%)
Assets			
Non-current assets			
Intangible assets	$1,898	$2,162	-12%
Property, plant and equipment	$968	$1,236	-22%
Trade and other receivables	$134	$131	2%
Total non-current assets	$3,000	$3,529	-15%
Current assets			
Inventories	$1,536	$1,245	23%
Trade and other receivables	$4,668	$3,284	42%
Investments	$2,719	$5,349	-49%
Cash and cash equivalents	$1,175	$4,727	-75%
Total current assets	$10,118	$14,605	-31%
Total assets	$13,118	$18,134	-28%
Liabilities			
Current liabilities			
Trade and other payables	$2,879	$2,088	38%
Finance leases	$8	$8	0%
Total current liabilities	$2,887	$2,096	38%
Non-current liabilities			
Finance leases	-	$7	NM
Total non-current liabilities	-	$7	NM
Total liabilities	$2,887	$2,103	37%
Total net assets	$10,231	$16,031	-36%
Share capital	$2,237	$2,237	
Share premium	$79,786	$79,786	
Foreign exchange reserve	($389)	$893	-144%
Accumulated deficit	($71,403)	($66,885)	7%
Total equity	$10,231	$16,031	-36%

Source: Company filings

Exhibit 28 shows Plant Health Care's cash flow statements for the year ended December 31, 2017 and 2016. The Company's operating cash outflow flow decreased to $4.9 million in the year ended December 31, 2017, compared to $9.1 million in the year ended December 31, 2016. This was primarily due to the decrease in net loss in the year ended December 31, 2017 compared to the same period a year ago. Net cash provided by investing activities was $2.6 million in the year ended December 31, 2017, due to the sale of money market and fund investments. Net cash provided by financing activities was zero in the year ended December 31, 2017, compared to $9.7 million in the year ended December 31, 2016.

Exhibit 28: Cash Flow Statement for the year ended December 31, 2017 and December 30, 2016 (in $'000s)

Particulars	For the year ended December 31, 2017	For the year ended December 31, 2016	Y-o-Y (%)
Cash flows from operating activities			
Loss for the year	($5,454)	($11,217)	-51%
Adjustments for:			
Depreciation	$393	$359	9%
Amortization of intangibles	$264	$273	-3%
Share-based payment expense	$936	$1,063	-12%
Finance income	($87)	($52)	67%
Finance expense	$2	$2	0%
Income taxes credit	($262)	($83)	216%
(Increase)/decrease in trade and other receivables	($1,024)	$1,145	-189%
Gain on disposal of fixed assets	($4)	($14)	-71%
(Increase)/decrease in inventories	($291)	$146	-299%
Increase/(decrease) in trade and other payables	$771	($973)	-179%
Income taxes paid	($121)	$205	-159%
Net cash used in operating activities	($4,877)	($9,146)	-47%
Investing activities			
Purchase of property, plant and equipment	($125)	($469)	-73%
Sale of property, plant and equipment	$4	$71	-94%
Finance income	$87	$52	67%
Purchase of investments	($2,258)	($7,918)	-71%
Sale of investments	$4,888	$10,060	-51%
Net cash provided by investing activities	$2,596	$1,796	45%
Financing activities			
Finance expense	($2)	($2)	0%
Issue of ordinary share capital	-	$9,747	
Repayment of finance lease principal	($8)	($9)	-11%
Net cash (used)/provided by financing activities	($10)	$9,736	-100%
Net (decrease)/increase in cash and cash equivalents	($2,291)	$2,386	-196%
Effects of exchange rate changes on cash and cash equivalents	($1,261)	$1,393	-191%
Cash and cash equivalents at the beginning of period	$4,727	$948	399%
Cash and cash equivalents at the end of period	$1,175	$4,727	-75%

Source: Company filings

Key Risk Factors

Financial risk
Since inception, the Company has a history of generating losses. Plant Health Care raises funds periodically to fund its working capital and development activities. If the Company were unsuccessful in raising capital in a timely manner, it would severely impede its commercial operations as well as research and development activities.

Credit risk
Plant Health Care sells majority of its products through credit sales. The ability of the customers to repay PHC on time is partly dependent on several macroeconomic factors such as economic strength of the industry and the geographic area in which it operates. Failure to successfully collect money from credit sales could potentially affect the Company's financial condition.

Dependence on employees and officers
Plant Health Care's ability to compete and potential success is highly dependent on retaining its key qualified personnel. Inability to retain such key personnel and attract new talents could hinder the Company's business activities.

Commercialization risk
The licensing of PHC's PRE*tec* technology depends on the evaluation partner's interest in conversion to a formal commercial offer. Any uncertainties in partner evaluation could potentially lead to a slowdown in PRE*tec* commercialization.

Regulatory risk
The Company has to obtain regulatory approvals and abide by the current rules and regulations governing them. Inability to follow such regulations could delay the sales of its products, and even hinder the development of its potential products.

Shareholding Pattern
As of May 30, 2018, the Company has 184.8 million fully diluted shares including stock options. Exhibit 29 and 30 show the capital structure and details of the major shareholders respectively.

Exhibit 29: Share capitalization, as of May 30, 2018

Particulars	Millions
Total Shares outstanding	172,822,881
Stock Options	12,037,060
Total fully diluted shares	**184,859,941**

Source: Plant Health Care PLC Investor Presentation

Exhibit 30: Major shareholder summary, as of March 2, 2018

Shareholder	% of holding
Mr. Richard I Griffiths	36.71%
1798 Volantis	20.64%
Boulder River Capital Corp	7.32%
Polar Capital	6.97%

Source: Plant Health Care PLC Investor Presentation

Profile of Directors and Management

Dr. Christopher Richards, Executive Chairman and Interim Chief Executive Officer

Dr. Christopher Richards is the Executive Chairman and Interim Chief Executive Officer of Plant Health Care. He has more than 30 years of experience in technology and life sciences. He has held several senior level positions at various companies located in South America, Europe and Asia. From 2003 to 2015, he held various leadership positions at Arysta LifeScience, a global agrochemical company. He has worked at companies namely Dechra Pharmaceuticals PLC, Cibus Global, Ltd. and Bio Products Laboratory Ltd. Dr. Richards completed his Masters in Zoology in 1975 and Ph.D. in Ecology in 1980 from St. John's College, Oxford University.

Michael J. Higgins, Senior Independent Director

Mr. Michael J. Higgins is a Senior Independent Director of the Company. He has over 25 years of expertise in advising companies to achieve high growth in the marketing service and technology sectors. From 1996 to 2006, he was a partner of KPMG LLP. From 2006 to 2011, he worked as a Senior Adviser at KPMG. He worked at Saudi International Bank and was an accountant with PwC. From November 2013 to October 2016, Mr. Higgins worked as a Non-Executive Director at Arria NLG PLC. He holds a Masters in Economics and Politics from Cambridge University.

Dr. Richard H. Webb, Executive Director

Dr. Richard H. Webb is an Executive Director of Plant Health Care. In 1995, he founded StepOut Ltd, a consultancy business firm. From 2012 to 2014, he played an important role in developing the Company's new business strategy and New Technology program. He holds a doctorate in pest biology from the London School of Hygiene & Tropical Medicine.

William M. Lewis, Non-executive Director

Mr. William M. Lewis is a Non-executive Director of the Company. He has held several senior positions at various companies namely Syngenta Crop Protection, Arysta LifeScience and Zeneca/ICI. He is the Chair of the Remuneration Committee and a member of the Audit Committee.

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Disclaimer