

## Performance Plants Inc., Canada

### THE COMPANY:

Performance Plants Inc. (“PPI” or the “Company”) was founded at Queen’s University in Kingston, Ontario, Canada. PPI has since developed into a global leading agricultural trait developer. In 2005, PPI was acknowledged by the Canadian Biotechnology Industry, BIOTECANADA, as the “**Most Promising Canadian Early Stage Biotechnology Company.**” PPI has successfully evolved from a research power house based on the discovery of desirable plant traits to a company focused on developing and commercializing products based on its validated second generation gene-based technologies. The Company has a solid Research & Development platform, a robust pipeline of proven technologies, and a successful commercialization strategy that allows the Company’s commercial partners to put PPI’s technologies into various staple crops worldwide. PPI does not introduce any foreign genes or matter into its technologies (products), rather it identifies and utilizes the plant’s own genes to increase crop yield.

### THE MARKET:

Since the successful introduction of the first generation of genetically-engineered traits in areas of herbicide tolerance and insecticide resistance, farmers have been seeking a second generation of technologies that can improve yield, quality and over-all productivity of food and bioenergy crops.

Yield is key for agronomists and equally as important for farmers, as demand for grains is projected to increase significantly. The drivers behind the increase in crop demand include a variety of factors such as:

- low global grain stocks,
- a heightened priority for global food securities,
- the addition of 3.0 billion more mouths to feed by 2050,
- increasing animal protein demand from the “BRIC” countries (Brazil, Russia, India and China) and
- a growing demand from the bioenergy sector to replace coal, oil and natural gas with renewable fuels made from biological feedstocks.



Increasing yield has become the top priority for the ag-biotechnology industry world-wide. The global seed market is estimated at approximately \$43 billion. The Company has set its sight on capitalizing this market by application of its validated and patented world-leading second generation, commercial ready technologies to all key crops. Through different genetic regulatory mechanisms, these technologies are all engineered for one single outcome -- crop yield improvement and are easily transferable between ag-food and bio-energy sectors.

## PERFORMANCE PLANTS TODAY:

Currently, Performance Plants has thirteen commercial license and co-development agreements with nine major multinational seed companies including Pioneer Hi-Bred (a Dupont Company), Stine Seeds, RiceTec, Scotts Miracle Gro and Bayer CropScience, allowing these partners to use PPI's technologies to develop high yielding seed varieties for commercialization.

The Company has opened up the Asian market by establishing multiple licensing and commercial product development agreements with three leading Chinese seed and agricultural biotechnology companies; Beijing DaBeiNong Technology Group, Shannxi Hybrid Rapeseed Research Center and Biocentury Transgene. More recently, PPI and Maharashtra Hybrid Seeds Company Ltd. (Mahyco) entered into a commercial licensing agreement using PPI technologies in various key crops in India and other South Asian countries for crop protection and improvement. More commercial agreements are being developed with additional multinationals and a series of seed market 'gate-keepers' around the world.

The company's Yield Protection Technology® ("YPT®") enables plants to better tolerate drought conditions and to produce higher seed yield under limited water conditions. YPT® technology was featured by world leading journals *Science* in 2008 and *Nature Biotechnology* in 2012. Since 2010, YPT® has been displayed in *Chicago Museum of Science and Industry* as a permanent exhibit for a drought tolerance genetic technology that has the potential to provide positive benefits and to improve the quality of human life.



PPI, in cooperation with its partners, expects to commercialize its first crop products (corn and cotton) with YPT® in 2016. In addition, PPI has a series of breakthrough technologies in different stages of development: Heat & Drought Tolerance Technology ("HDT™"), Water Use Efficiency Enhancement Technology ("WET™"), Biomass Enhancement Technology ("BET™"), and Yield Enhancement Technology ("YET™"). Together with our commercial partners, these technologies are currently being introduced into corn, soybean, rice, wheat, canola, cotton and other crops for development of next generation of high performance seeds for farmers world-wide.

## THE PRODUCTS:

PPI currently has five validated technologies in various stages of commercial development. YPT® is currently undergoing extensive field testing in multiple crops by PPI's licensing partners for potential commercialization. HDT™, WET™, and YET™ have also been licensed to multiple commercial partners for product development in different crops. In summary, the technologies are:



**Yield Protection Technology ("YPT®"):** a breakthrough technology to enable plants to maintain maximal yields through periods of drought. In 5 consecutive years of field trials under water stress conditions, YPT® canola has consistently shown higher yields than controls. YPT® has also significantly enhanced yields in field grown elite hybrid corn.



**Heat & Drought Technology (“HDT™”):** a single-gene based breakthrough technology to preserve yield by enhancing plants’ tolerance to heat, drought or combined stress. Over two seasons of field trials in North and South America, HDT™ canola plants achieved significant higher yields than the controls when faced with periods of hot and dry growing conditions.



**Water Efficiency Technology (“WET™”):** a technology that maximizes crop growth and productivity with reduced amount of water by enhancing plants’ water use efficiency, allowing plants to grow in regions that are constantly short of water or regions that rely on irrigation during the entire growth season. The WET™ model plants can produce higher seed yield and biomass than controls when water is limited.



**Yield Enhancement Technology (“YET™”):** a technology that can boost seed yield. In the laboratory conditions, the YET™ model plants produced significantly higher grain yield under both optimal and stress growth conditions.



**Biomass Enhancement Technology (“BET™”):** a technology improves biomass yields, reduces cost of biomass feed stocks for feed crops such as alfalfa and bioenergy (non-food) crops including sugarcane, sorghum, switchgrass and Miscanthus.

#### **FURTHER INFORMATION ABOUT THE COMPANY**

Performance Plants Inc. is a global leader in providing multiple proven yield enhancing agricultural biotechnologies for commercialization and revenue generation. The company’s patented technologies enhance plant productivity (including seed yield and plant biomass) and weatherproof food and non-food biofuel crops through periods of drought and heat stresses resulting in a more abundant, consistent and cost-effective harvests for farmers. The privately-held company is headquartered with R&D facilities in Kingston, Ontario, Canada. For additional information, please visit: [www.performanceplants.com](http://www.performanceplants.com).

#### **ENQUIRES:**

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