

## OVERVIEW

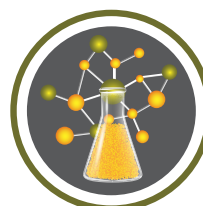
In 2005, the United Nations Sustainability Goal (SDG2) called on agriculture to double productivity on existing land in a sustainable manner to ensure the world has enough food, feed, fiber and fuel to meet demand in 2050. The industry responded with innovation focused on better seeds, better equipment and better farming practices. However, productivity gains have not accelerated to meet demand.

A critical challenge facing U.S. corn seed producers and grain farmers is the dependence on Mother Nature to pollinate their crops during less-than-optimal environmental conditions. PowerPollen® offers a breakthrough, scalable technology to collect, preserve and apply pollen on-demand, thereby improving the productivity, profitability and sustainability of modern farming practices.

### ON-DEMAND POLLINATION



Collect



Preserve



Apply

Since the 1930s, many have tried to preserve and store pollen in an efficient, scalable manner and failed. PowerPollen's patented pollination technology is the first to remove weather variability by successfully collecting, preserving and applying pollen in a scalable manner. In addition to significantly increasing yield, this technology bypasses resource intensive steps of current seed production, including labor, land utilization and antiquated breeding methods; and improves seed purity, resulting in reduced seed discard and decreased production costs through more efficient land utilization.

By leveraging specially designed field and lab equipment and improving pollen storage practices, PowerPollen has successfully applied its technology across 1000s of commercial acres. While the company focused first on bringing this solution to corn seed producers, it is scalable and harmonious with the existing ag system making it a novel tool to help address global productivity challenges.

### Drought affected



WITHOUT powerpollen®

### On-demand pollination



WITH powerpollen®

**3X**

INCREASE IN  
SEED YIELD

PowerPollen's technology has increased yield by 20% or more in customers' hybrid seed production fields and has achieved as high as 44% in weather impacted fields.

## POSITIONED FOR GROWTH

In 2018, PowerPollen successfully proved its pollen collection, preservation and application process, then scaled field operations using custom designed machinery across in-field production on 22 customer fields at eight different seed production centers across Iowa, Indiana and Illinois. In addition to yield improvements, the ability to manage and apply pollen on-demand enabled significant reductions in contamination from undesired sources of pollen, including moving a field from out of specification to within specification.

PowerPollen is in active discussions with North American seed companies, and **announced a commercial agreement** with Corteva. To ensure rapid adoption by licensees, PowerPollen is implementing its technology transfer program this year and expanding partnerships with seed equipment manufacturers to ensure integration.

These key milestones in corn will enable the company to reinvestment and expand into other crops and across geographies. In 2020, BASF and PowerPollen **signed an agreement** to further develop and apply the company's patented pollen preservation and application technology to improve cross-pollination and enhance BASF's proprietary wheat program.



Application of PowerPollen's preserved pollen in a commercial corn field

Due to the unique and elegant solution developed, PowerPollen was granted **two U.S. patents** in 2019 that are foundational to the technology. Several additional foundational patents are expected to grant in 2020 and 2021. This suite of patents provides PowerPollen with excellent intellectual property protection as we continue to scale our commercial operations. Furthermore, its ongoing patent monitoring has not uncovered any competing pollen preservation management that could compete with PowerPollen.

## SOLID FOUNDATION

Since inventing the technology five years ago, PowerPollen co-founders have garnered strong support from investors to complete necessary research and development for commercialization. Equity investors include two highly recognized crop seed production companies as well as the Iowa Corn Growers Association – further validating the market's interest in pollination technology.

The company's leadership team, including Board of Directors, Advisors and senior management team, is comprised of seasoned agriculture and technology experts. Many on the team led breakthrough innovations in seed science, biotechnology, crop reproduction and agronomy, as well as helped advance technology adoption among farmers.



**Dr. Todd Krone**  
Co-founder; CEO  
Geneticist & Seed Industry Veteran



**Jason Cope**  
Co-founder; CIPO  
Engineering Leader & Seed Industry Veteran