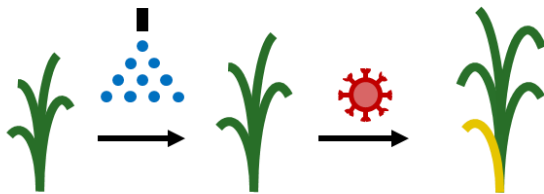
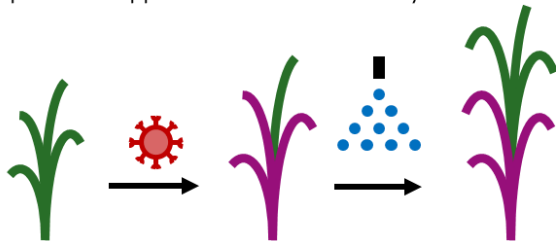




Most farmers take a risk with disease and 60% of the time unknowingly experience significant loss.



Indiscriminant spraying sometimes results in excess pesticide application and inefficiently treats disease.



INSIGNUM plants allow for treatment precisely when/if needed, sustainably increasing production.

Insignum AgTech enables plants to use their pigments to talk to growers. Farmers know in real time when issues arise to intervene sustainably, precisely, and proactively to increase crop production. In field trials over two years, Insignum AgTech's corn plants revealed all fungal diseases before they could be seen by eye. After seeing the field demo, Beck's Hybrids and FBN are testing in corn hybrids in 2023.

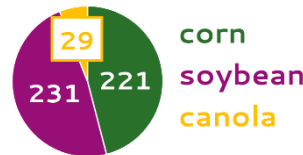
Market Size:

\$62B

Biotech Seeds

\$150B

Precision Ag



481M crop acres in our market area

\$1T

Fungal disease damage

Additional Traction: Beck's Hybrids monitored our field trials in 2022 using their drones and were able to detect our signals. Only disease triggered the 'flare', giving farmers directly actionable data. USDA Regulatory approval is expected in 2023. Advisors include Corteva's Global Commercial Director and (retired) Syngenta Global Head of Digital Ag. Insignum is located at Beck's Hybrids in central Indiana.

Business Model: Insignum will license the genes, or traits, to seed companies. Insignum will receive \$5-10 per acre for Technology Royalty Fees. Large seed companies also sell crop protection, such as fungicides, and are strategically moving to replace chemicals with biological solutions, which require better timing and precision to be effective.

Future Milestones: Other stresses will be signaled with specific natural colors, like low fertility or insect attack with red or blue. The platform will be expanded to include other crop species. Remote sensing capabilities from field equipment, drone/plane, or satellites will be developed with a partner.



Kyle Mohler, PhD.

Founder & CEO

BSc: Purdue University.

PhD: University of Edinburgh in Plant Biochemistry.

Raised on a now 3700-acre Indiana crop farm. Experience in cutting-edge, patented scientific research. Knows the ag industry and has years of research experience, leading to many publications and patents.