

Executive Summary

Water-status sensors for increased woody crop yield, quality and water savings

Opportunity. Water-status sensors for woody crops comprise a \$1B market ripe for innovation. Fruit and nut growers lack information to irrigate effectively, resulting in lost yields, decreased quality, unhealthy trees and wasted water. Existing solutions are insufficiently accurate or too labor intensive for widespread adoption. There is opportunity for an accurate, automated, easily installed and affordable sensing system to enable worldwide improvements in crop efficiency.

Product. FloraPulse sells microT, a hardware-enabled subscription service that measures plant water status and recommends irrigation scheduling. The data is gathered by implantable sensors installed by the grower and sent to the cloud for analysis and display. Our patented sensors provide the most accurate and actionable data to guide irrigation and help growers maximize crop yield, quality, health and water savings. Field trials show that increased irrigation accuracy, enabled by microT, can increase per-acre revenues by \$700.

Team. FloraPulse was founded by 3 Cornell scientists that understand the technology and market. Michael Santiago—Mechanical Engineering PhD, developed the initial prototypes and interviewed 150+ customers. Alan Lakso—Fruit Physiology professor, has worked with growers for 40+ years. Abraham Stroock—Chemical Engineering professor, invented the technology. Justin Fontes—employee #1, Mechanical and Electrical engineer, spent previous 10 years developing hardware, firmware and software for aircraft testing systems. We based in Davis, CA.

Traction. Since 2017, we raised \$1.2M in non-dilutive SBIR research awards to develop microT, and successfully field tested the product in almond, grape and prune commercial orchards and vineyards. In 2019-2020, we received \$50k in customer deposits and sold the first 60 subscriptions (\$90k) to 15 customers in the US, Chile and Australia. Customer feedback has been very positive.

Ask. We are looking to hire a seasoned CEO to help the company raise funds, build partnerships, and continue increasing product sales in the US and abroad.