



Innovative Agtech for orchard management

June 2023

Agriculture Victoria Mildura SmartFarm

- Almond research platform
- Established to address almond industry strategies
 - Current systems - resource inputs
 - Higher density - shake-and-catch
- **Evaluating AgTech**



ENVIRONMENT

soil moisture

EnviroSCAN  soil moisture probes




GroPoint soil moisture probes



Aquaflex soil moisture probes



climate

MEA  weather station



TinyTag temperature loggers



light

bespoke spectroradiometer



ceptometer



crop protection

AVIX Autonomic bird laser device



LoRaWAN
4G/5G
wireless

TREE TRAITS

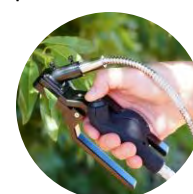
growth/architecture

Leica BLK 360 LiDAR

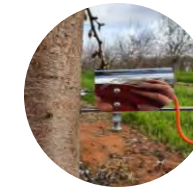


tree physiology

Spectral Evolution spectroradiometer



AgriWAN trunk dendrometer

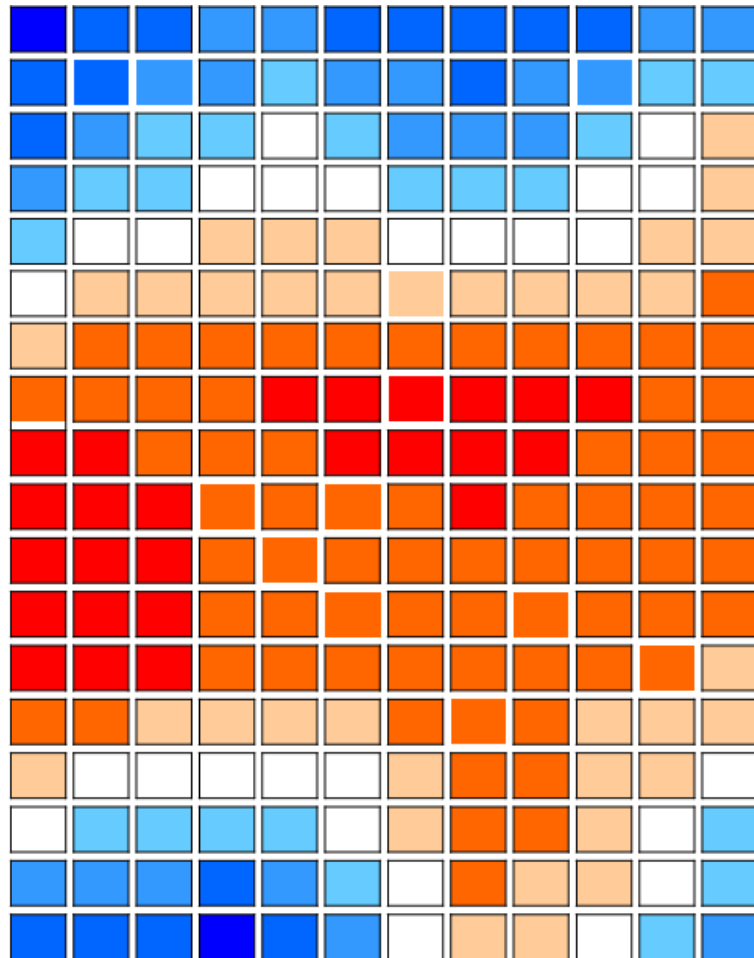


Green Atlas Cartographer

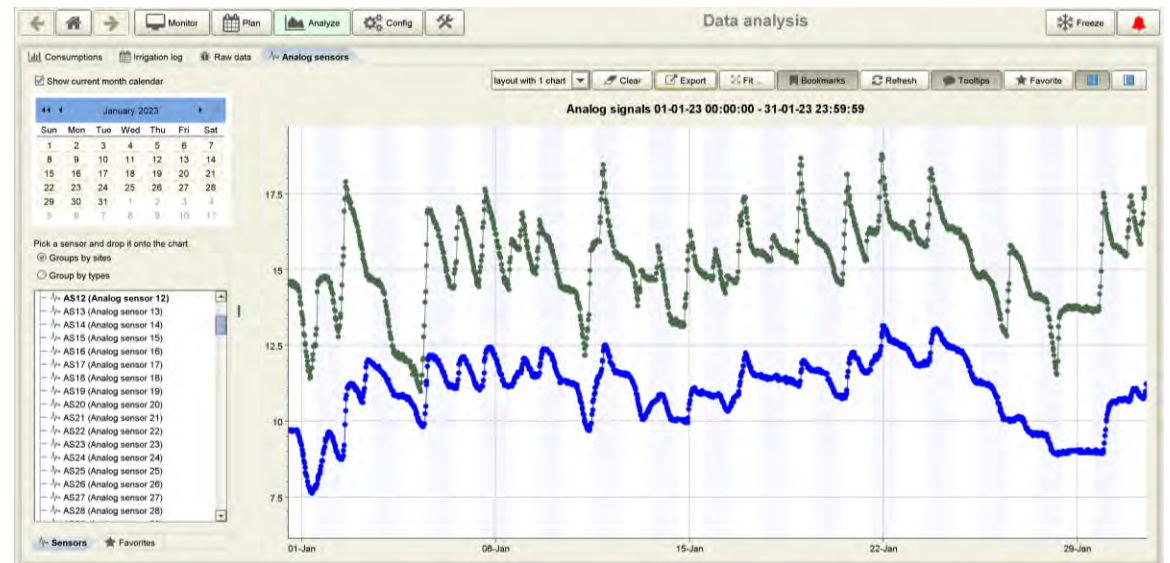
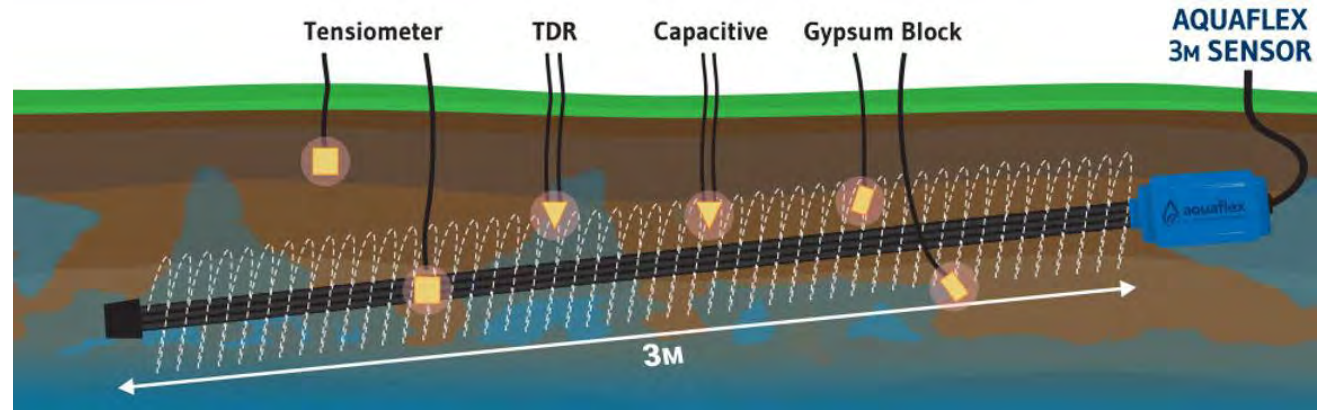


Soil moisture sensor network – irrigation management

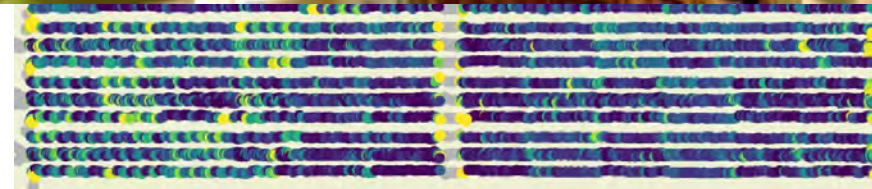
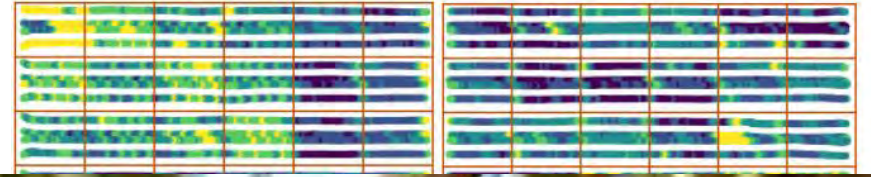
Readily available water (RAW) per experimental plot



High RAW
 Low RAW

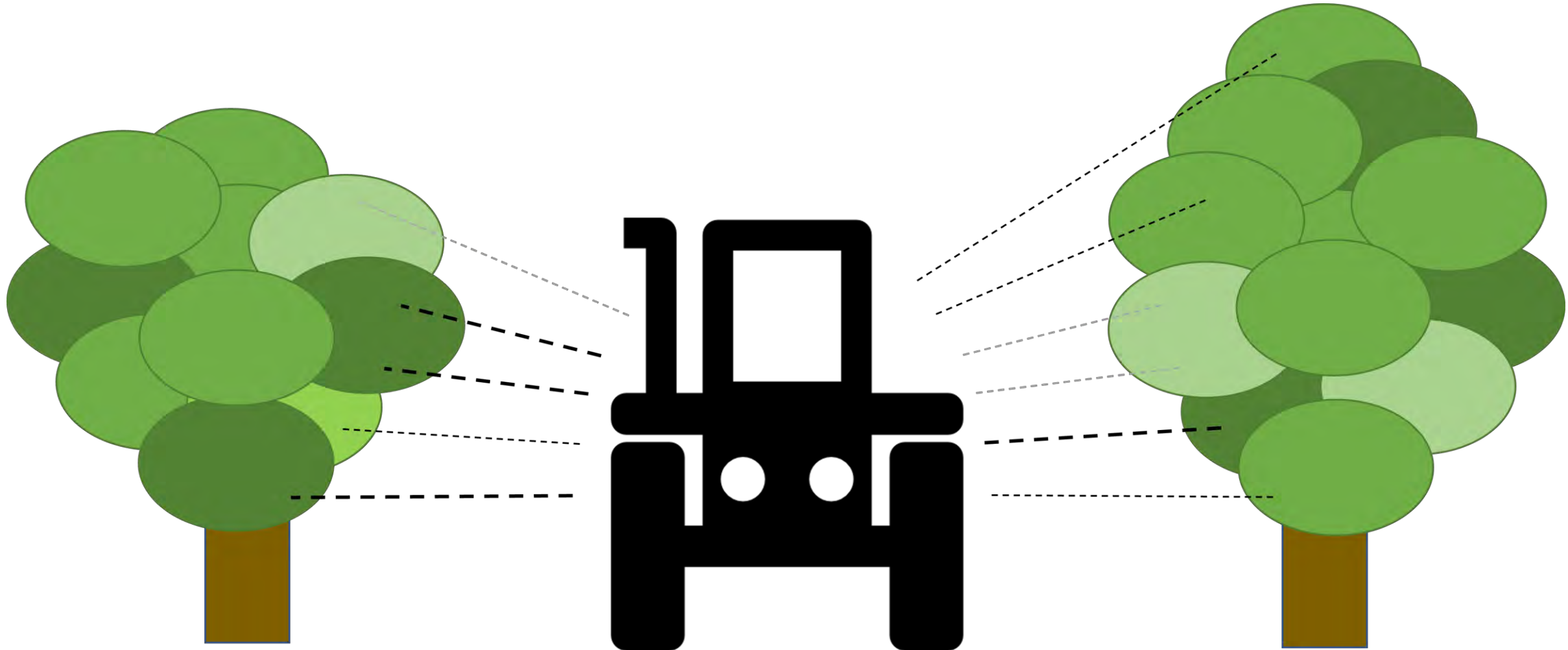


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Pulse width modulating precision spray system

Smart Apply
Intelligent Spray Control System™





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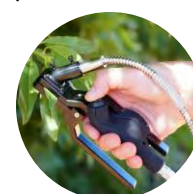
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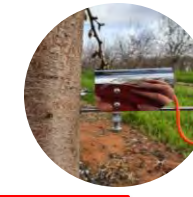


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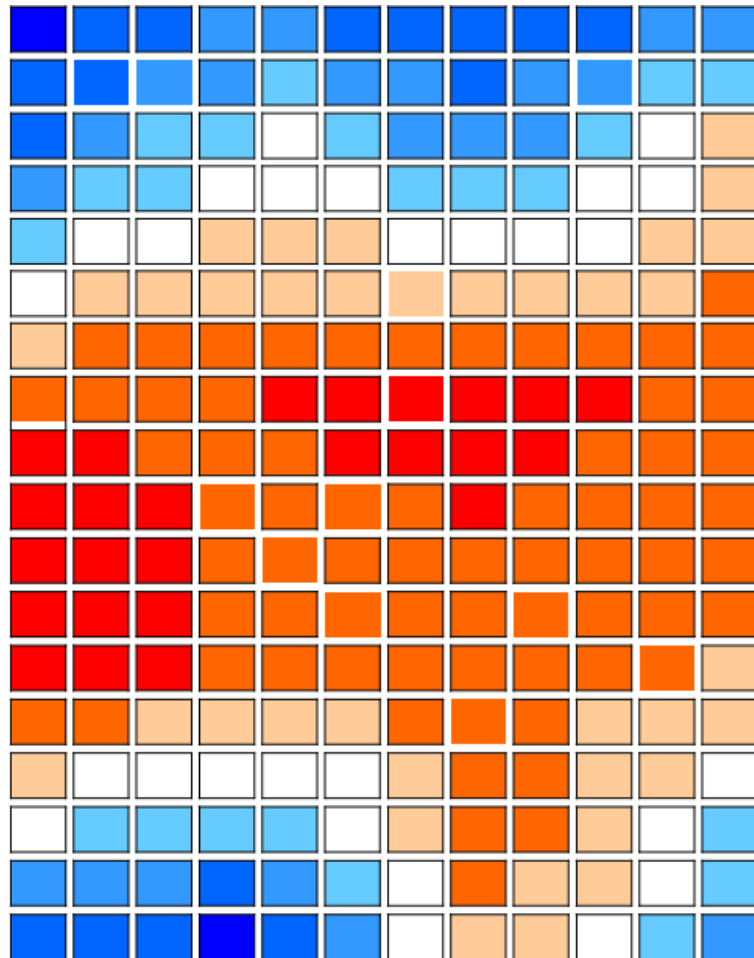


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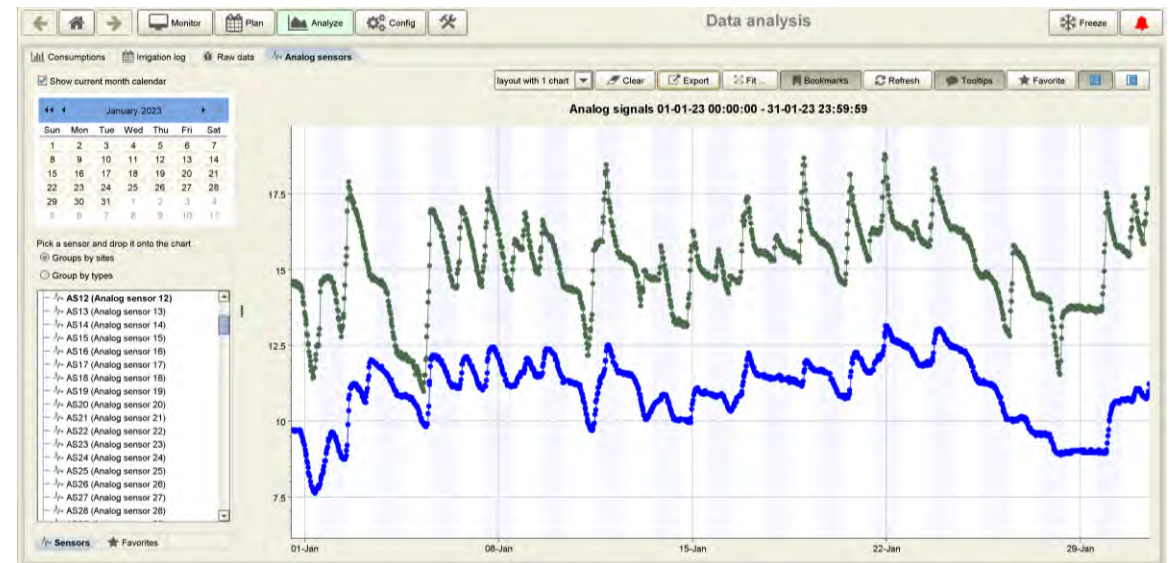
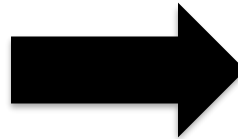
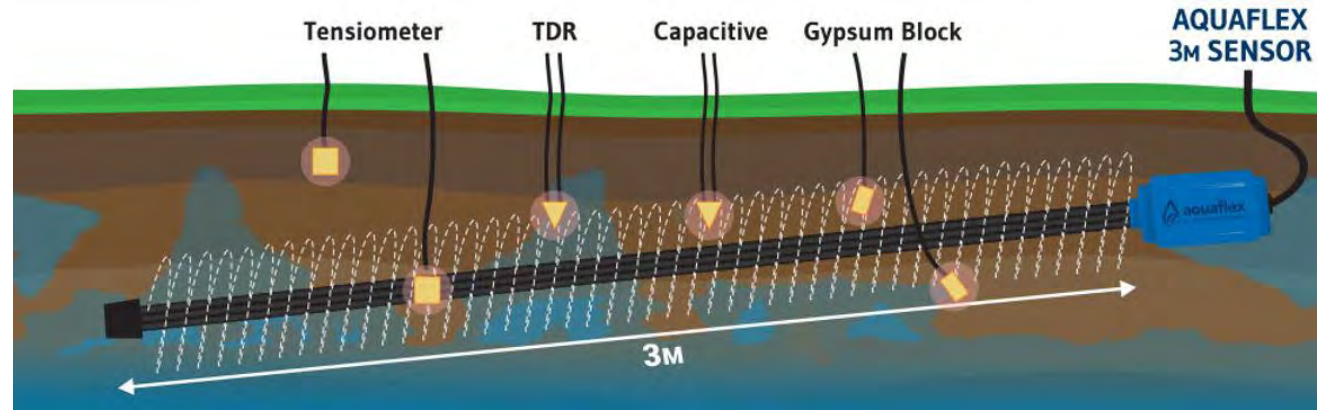


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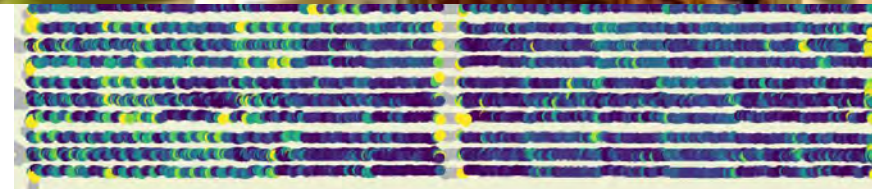
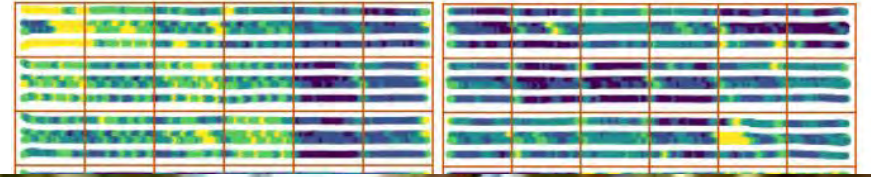
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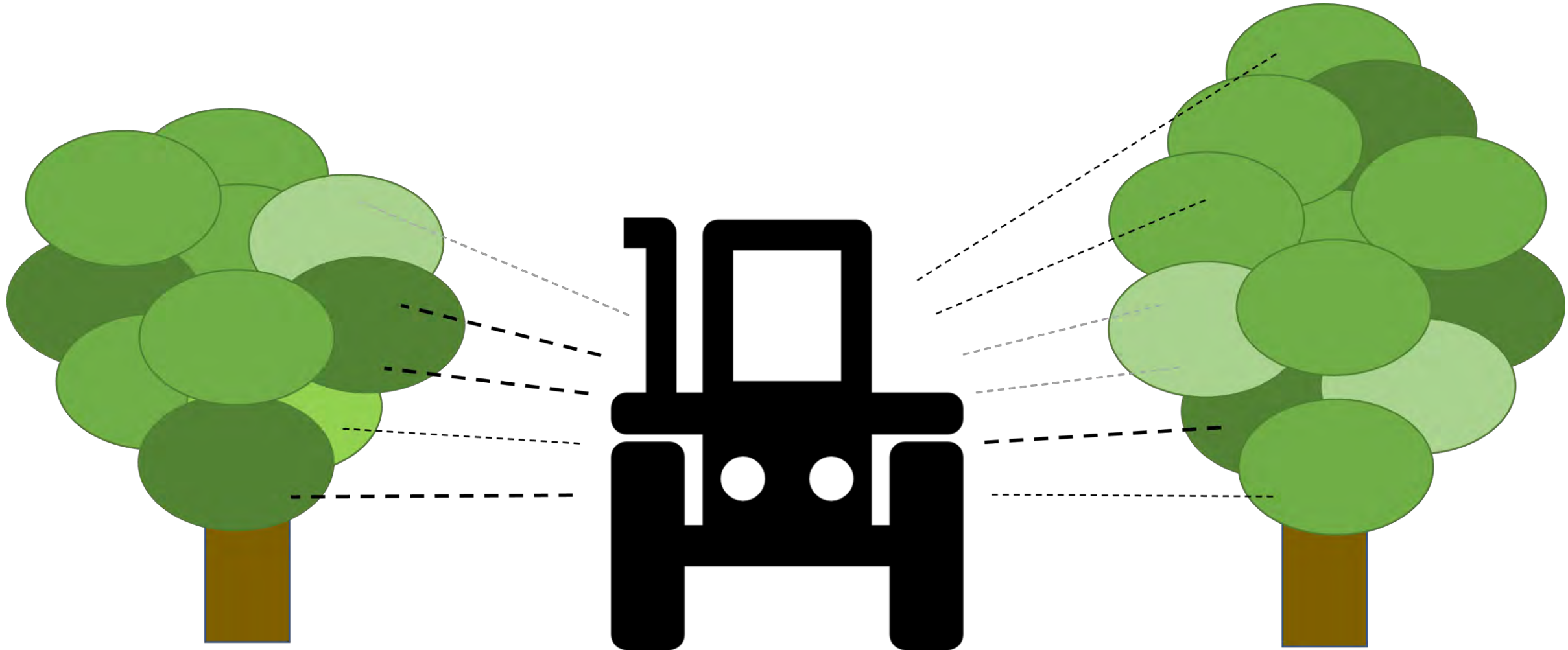


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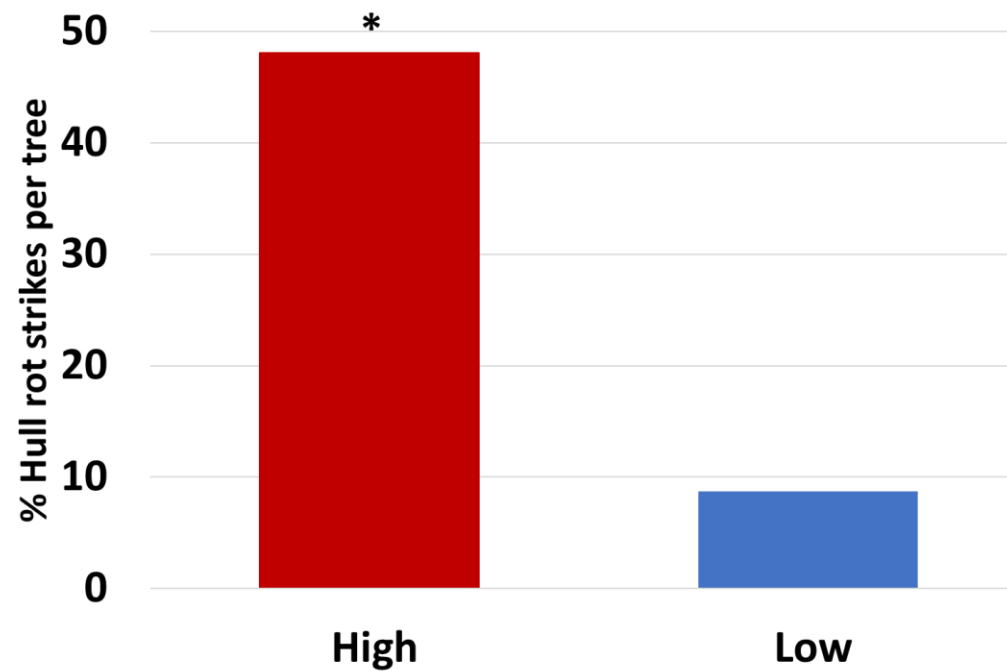


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Remote imaging technology for disease risk prediction



Actual hull rot strikes
Feb/March 2021



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Hort Innovation

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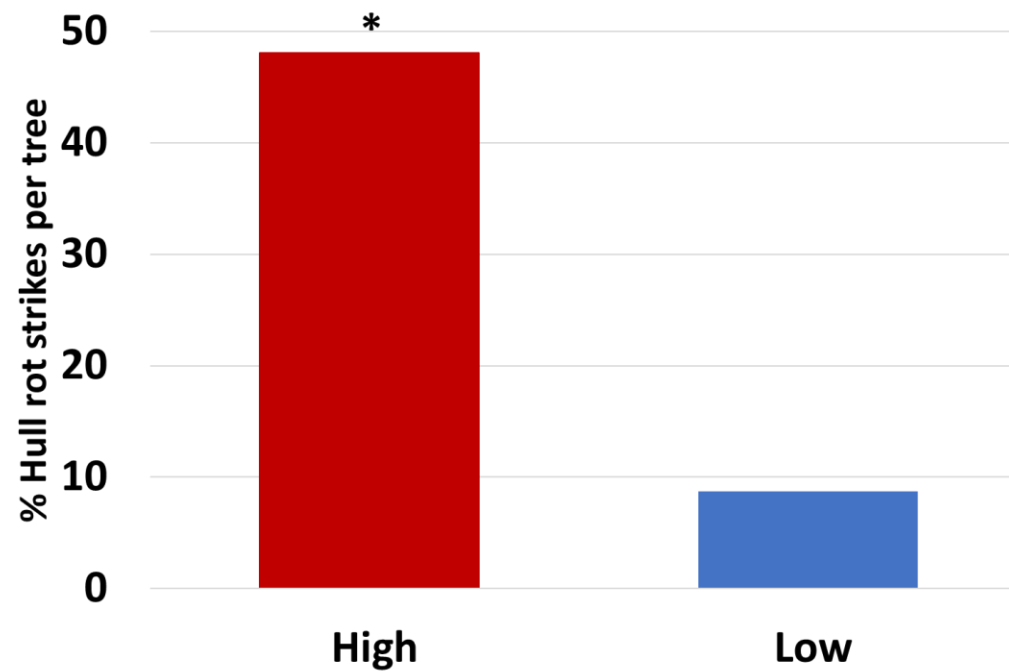
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