Performance through collaboration

THE BANDICOOT® SOIL PROBE

Real-time soil profiling for smarter decisions

INNOVATIVE SOILTECH FOR AUSTRALIAN FARMERS

The Soil CRC's BANDICOOT® soil probe is an advanced prototype soil sensing system that delivers in-field measurements of key soil physical and chemical properties. It combines a motor-driven probe, sensor fusion, and real-time visualisation into a rugged, portable tool designed for validation under commercial field conditions.

The BANDICOOT® probe allows multi-depth readings and geospatial mapping of soil compaction, moisture, and electrical conductivity (EC). It is now undergoing operational trials with growers and agtech collaborators.

SNAPSHOT

- **Portable and intuitive: Simple operation – stand, press a button, and receive soil profile insights in under 30 seconds.**
- **Farm-ready toughness: Designed for real-world agricultural conditions.**
- **Data-driven decision-making: Provides actionable soil insights to guide water use, input efficiency and crop yields.**
- **Proven market demand: Developed in consultation with growers, with trial interest from Simplot, VegNet, NRE Tas, Cradle Coast NRM, Riverine Plains and Southern Farming Systems.**

INDUSTRY CHALLENGE

Traditional soil measurement using stationary probes and lab-based testing is costly, requires multiple tools or methods, and only provides information about a single point in the paddock. This makes frequent or widespread soil monitoring impractical, and leaves growers uncertain whether their data accurately reflects conditions across the paddock.

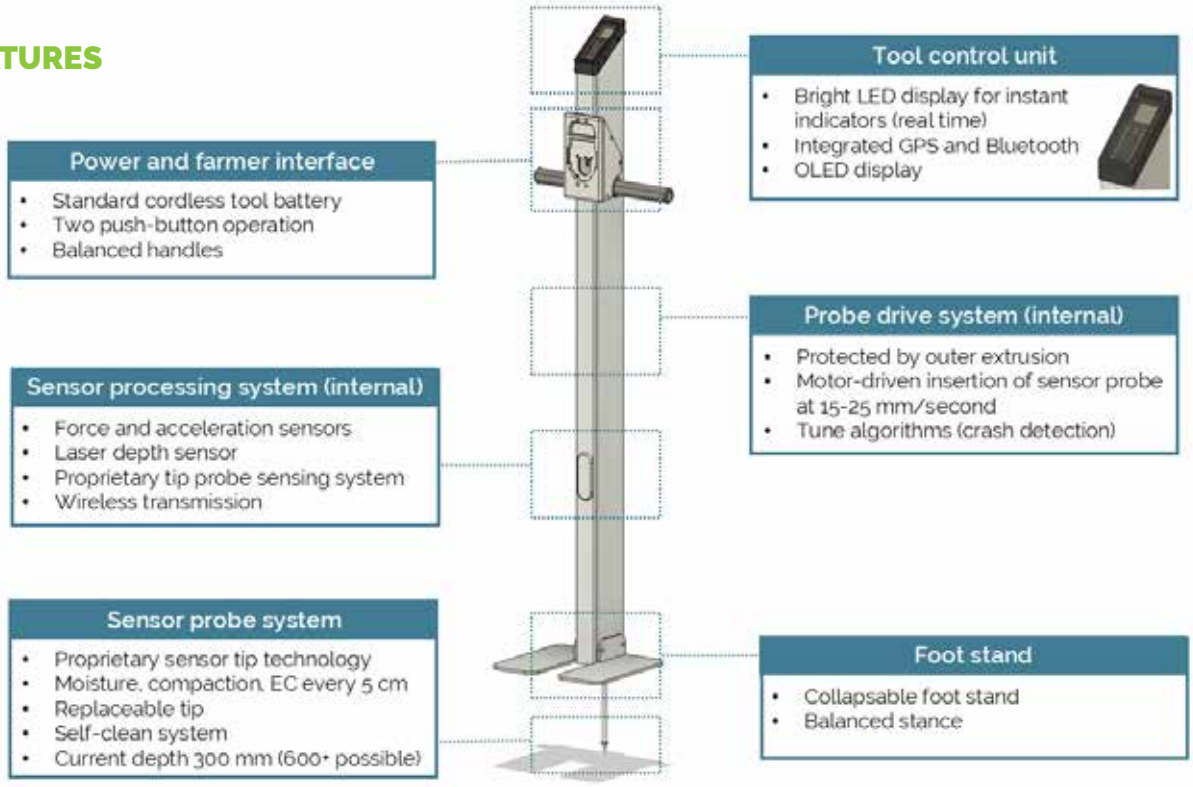
THE SOLUTION

The BANDICOOT® soil probe provides actionable insights into compaction, moisture, salinity and clay content in under 30 seconds, making it practical for routine in-paddock use. One-person operation makes the probe easy to use and eliminates the need for complex installations or lab testing, enabling farmers to make informed decisions instantly in the field.

It allows farmers and consultants to take readings at multiple depths, geolocated with GPS so that information can be mapped in real time. There is also potential for the probe to be integrated as an attachment to farm machinery.

While initial trials focused on vegetable growers, the BANDICOOT® soil probe has broad applications across horticulture, broadacre cropping, regenerative agriculture and precision irrigation planning.

KEY FEATURES



NEXT STEPS

The BANDICOOT® soil probe has been listed on the AgriFutures grow[AG] platform seeking commercial partners, agribusiness investors, pilot partners in high value horticulture, and agtech providers and consultants interested in integrating the tool into advisory services. Learn more at www.growag.com/organisation/soil-crc.

The BANDICOOT® soil probe in use (source: Tasmanian Institute of Agriculture).

GET IN TOUCH

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