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Sowing Possibilities.

Mapping October 20, 2026 · 2 min read

Why citrus is the entry point for aerial information in Uruguay

A concentrated sector with recurring decisions per block and per tree is where a drone stops being a toy and becomes a management tool.

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When drones in agriculture come up, the conversation usually starts with the technology: sensors, indices, resolution. We prefer to start with the decision. What does the producer have to resolve this week, and what information would change the answer?

With that question in hand, citrus comes first for three reasons.

1. It is a concentrated sector

DIEA estimated 13,294 hectares of citrus in 2025. The 2023 survey recorded 413 farms, but eight companies above 400 hectares accounted for 63% of production. Between 39 and 140 farms exceed 20 hectares.

That makes it possible to name accounts, understand their problems one by one and design a product that answers visible needs: inventory, block comparison and targeted field visits.

2. Decisions are made per block and per tree

In a citrus orchard the management unit is not the plot but the block, and often the tree. Missing trees, anomalous trees, variety, rootstock and age define what is done in each sector. A 10-metre satellite pixel cannot tell one tree from its neighbour; a drone image can.

Aerial information stops being a nice picture when it becomes a **verifiable inventory**: how many trees there are, how many are missing, which ones behave differently from their comparables and where they are.

3. The history is worth more than the flight

A Territorial Baseline of the orchard has value on day one. But it gains value every time it incorporates a new date, an inspection, an intervention and a response. That cycle — image, anomaly, inspection, intervention, new image — is what turns a survey into a management tool.

What an index does not do

An index identifies a different response. It does not determine whether the cause is water, nutrition, plant health, soil, management or crop structure. That part still belongs to the agronomist and the field visit. Saying it first avoids misunderstandings later.

At Trofoni Mapping we start with citrus and fruit because that is where sub-metre detail and temporal continuity add the most value. Crops, livestock and dairy extend the field of application on the same capture, processing and visualization capacity.

Sources

- DIEA – MGAP. Citrus survey 2023 and 2025 area estimate.
- MGAP – INE. General Agricultural Census 2024.
- OPYPA. Yearbook 2025.

This article states sources, date and limits. It is not advice for a particular case.

https://trofoni.com/en/insights/citrus-entry-point