

Crop Sprayer App: Dosage calculator for plant protection products

Optimizing Pesticide Application for Sustainable Agriculture

This mobile application calculates the exact amount of pesticide concentrate required based on user inputs such as sprayer type, application area, and crop specifics. It adjusts calculations for different sprayer sizes and operates offline after initial setup, ensuring accessibility in various field conditions.



CABI PlantwisePlus

CABI PlantwisePlus
Claire Palmer

Commodities

All Crops

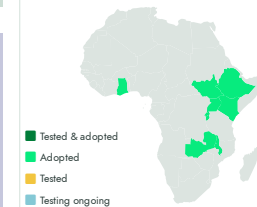
Sustainable Development Goals



Categories

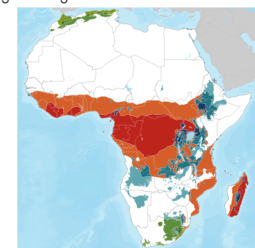
Production, Digital applications,
Advisory and information service,
Pest control

Tested/adopted in



Where it can be used

This technology can be used in the colored agro-ecological zones.



Target groups

Farmers, Sellers,
Advisory and Extension Services

This technology is **pre-validated**.

9.7



Scaling readiness: idea maturity: 9/9; level of use: 7/9

0 USD

Crop sprayer App



Open source / open access

Problem

- **Reduced Profitability:** Up to 40% of crops are lost to pests and diseases, directly affecting yield and revenue for agribusinesses.
- **Inefficient Resource Use:** Conventional pesticide application methods can lead to as much as 75% misapplication, resulting in unnecessary costs and environmental liabilities that diminish return on investment.
- **Operational Inefficiencies:** Inaccurate dosing and inconsistent application practices waste valuable resources, hindering scalability and competitiveness in the marketplace.

Solution

- Optimize input costs and boost profitability with accurate pesticide application.
- Streamline operations and minimize waste through data-driven decision-making.
- Gain a competitive edge with precision-based pest management.

Key points to design your business plan

- **Optimize Input Costs:** Adopt the Crop Sprayer App to calculate exact pesticide requirements, reducing waste and lowering production expenses.
- **Increase Operational Efficiency:** Streamline spraying processes with accurate measurements, saving time and resources during large-scale applications. Android Apps on Google Play
- **Demonstrate Sustainability Commitment:** Showcase responsible pesticide use, enhancing brand reputation and meeting consumer demand for environmentally conscious practices.

Gender assessment  3

Climate impact  2



Crop Sprayer App

<https://e-catalogs.taatafrica.org/com/technologies/crop-sprayer-app-dosage-calculator-for-plant-protection-products>

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Enquiries e-catalogs@taatafrica