



# DropVision Basic

## Droplet and Swath Analysis Software

DropVision Basic is designed for **characterizing ground and aerial spray** equipment that applies oil or water-based insecticide products by **ultra-low volume (ULV)**.

DropVision Basic provides detailed droplet data for **EPA label requirements**, specifically the volume median diameter (VMD) or DV 0.5. The system also reports DV 0.9 and DV 0.1.



## WAYS DROPVISION BASIC CAN SUPPORT YOUR OPERATION



**Reads droplet sizes from 3 to 400 microns**



**Ability to read droplets collected on Teflon or magnesium oxide slides**



**Quickly calibrate spray equipment - backpacks, trucks, manned or unmanned aircraft**



**Supports resistance monitoring when paired with caged adult mosquito trials**

## THE SYSTEM INCLUDES

- A trinocular, compound microscope
- Detachable, high resolution digital camera
- A laptop computer
- DropVision Basic Advanced Droplet Image Analysis software
- DropVision Basic Graphing & Reporting software

## A STRONG HISTORY OF AERIAL APPLICATION + DROPLET ANALYSIS TECHNOLOGIES

Almost four decades of experience inventing GPS guidance systems, droplet analysis, and aerial application solutions - and we never stop embracing new technology. Leading Edge's history includes partnerships with government agencies and research institutions to manage vectors, pests, noxious weeds, harmful algae blooms, and more. Our company understands every aspect of pesticide applications, from the regulatory issues at the federal and state levels to the point that a droplet deposits on a weed, on a crop, in the water, or on an insect.



# DropVision Fluorescence Technologies

**DropVision Fluorescence provides for the efficient and immediate analysis of the droplet spectra produced by aerial or ground spray systems.**

Droplets are collected on 3mm rods or 1" Teflon or magnesium oxide slides using a standard slide wave or a spinning impinger. The slide is placed under the microscope and the software electronically captures and analyzes each droplet, eliminating any background objects, coalesced or nonqualified droplets through advanced proprietary image analysis algorithms.

## Rapid Analysis, Proven Cost Savings, and Efficiency

Manually reading slides is time-consuming, labor-intensive, and subjective. DropVision Fluorescence increases accuracy and reads a slide in seconds.

- Reports provide applicators, pesticide manufacturers, and research organizations with current EPA label standards and requirements
- Multiple graphs show droplet data based on DV 0.1, DV 0.5 (or VMD), DV 0.9, relative span, number of drops counted and area counted per mm<sup>2</sup>, % volume, and cumulative totals

## Superior Capabilities & Versatility vs. Conventional Probes and Lasers

DropVision can accommodate a single slide for spray equipment calibration or an unlimited number of slides and locations.

- Wands are limited to measuring droplets 6 feet or less from the point of the spray cloud; probes cannot be used for true product efficacy testing under actual field conditions
- DropVision allows for comprehensive data analysis for drift and deposition studies for wide-area ULV applications
- Pesticide manufacturers rely on DropVision for evaluating new products and materials
- DropVision is the only automated droplet analysis system commercially available that provides calibration and characterization of aircraft - both manned and unmanned (UAS/drones)

## Flexible Data Output

DropVision Fluorescence produces a comma delimited ASCII text file that is easily imported into Microsoft Excel® for further analysis. Each field of information is labeled and simple to interpret.

## Monitoring Larger Droplets or Cryptic Habitats?

DropVision AG software analyzes cards, placed at an intended application site, to determine the spray rate deposited, providing volume, droplet spectrum, density, and percent coverage.



**CAGED MOSQUITOES AND SPINNING IMPINGER**

