CONDUCTING FIELD STUDIES IN A CONTROLLED SETTING

Battelle’s Ambient Breeze Tunnel facility can help you save time and money by preventing Mother Nature from interfering with your field studies. Our one-of-a-kind spray testing facility generates data that enables you to better predict the performance of your products in the field.
THE NEED
To evaluate spray drift from pesticides, studies must be conducted to estimate overall exposure. Along with toxicity data, spray drift data are used to assess the potential exposure of non-target organisms to pesticides and determine the need for appropriate precautionary labeling.

BATTELLE’S ADVANTAGE
Spray drift field studies are costly – especially when the weather doesn’t cooperate. But our Ambient Breeze Tunnel offers a way to conduct initial spray drift field studies within a controlled setting. With the flexibility to quickly test full-scale sprayers under a range of wind speeds in a controlled environment, our facility gives you the opportunity to prescreen formulations before you deploy the final product in the field.

Battelle has conducted tests in the Ambient Breeze Tunnel that demonstrate similar spray drift and deposition patterns observed from actual traditional field studies. Data from the Ambient Breeze Tunnel very closely align to data from traditional field studies giving confidence in predicting final field study performance and outcomes.

All studies are conducted under ISO or GLP compliance as required.

OUR SERVICES
• Field testing in a controlled-wind environment to replace field drift and deposition testing
• Nozzle testing for ground and aerial applications
• Flexible configurations for droplet sizing, including concurrent and cross-flow winds in low-speed and high-speed setups
• Spray testing designs for turf, crops, orchard and vineyard spray applications
• Assessment of downwind drift of spray material for ground deposition and airborne particle measurement
• Determination of dust and granular product drift
• Agricultural spray boom simulation design and testing
• On-site analytical chemistry laboratories for supporting analysis
• In-house modelling (AgDisp, RegDisp)

Facility Details
• Located outside Columbus, Ohio
• Approx. 150 feet long, 20 feet wide, and 20 feet high at the peak
• Built in 2001, remodeled in 2018
• Winds speeds range from 2 mph (ambient) to 192 mph (aerial releases).
• Airflow is uniform with low turbulence
• Can add simulated crop cover.