

Total Spray Droplet Management™ Protects Investments in Spray Applications



Maintaining great outdoor playing surfaces requires spraying plant protectants, growth regulators, and foliar nutrients. Off-target movement of the spray droplets can influence how effective those expensive applications are, especially if they end up blowing into an applicator's face or neighboring yards.

"Studies indicate 18-48% of spray volume is susceptible to off-target movement. The spray droplets need to reach the target plant and the product must be retained on the leaf surface to reduce exposure and ensure a successful application," said Justin Olmstead, turf product manager at Precision Laboratories.

Common causes of off-target movement of spray applications are wind, sprayer pressure, droplet size and droplet bounce when it hits the surface of the plant. Minimizing all of these factors is the key to reducing human and environmental exposure and improving product coverage, adhesion and efficacy. Total Spray Droplet Management™ involves controlling these risk factors for each spray droplet from the moment it enters the sprayer tank, to the moment it is absorbed into a target plant.

Total Spray Droplet Management

The Precision Laboratories' concept of Total Spray Droplet Management encourages the applicator and turf manager to consider the factors that affect the spray droplet throughout the three main areas in its application cycle – in the tank, through the air and on the target.

With this in mind, Precision developed an advanced adjuvant technology called Border T&O. It has many benefits throughout the spray droplet's life cycle and is designed to improve droplet retention and coverage on the leaf surface while dramatically reducing off-target movement.

1. In the Tank- Border T&O maximizes compatibility by utilizing zwitter-ionic chemistry to adjust its charge based on the tank mix environment.

Compatible with:

- *Anionic, cationic and nonionic spray solutions*
- *Foliar fertilizers, plant protectants and pesticides*
- *Low pH spray solutions*

2. Through the Air - The unique and natural polymer in Border T&O creates larger droplets for superior drift reduction and increased deposition on the target plant.

- *Retains larger droplet size by resisting hydraulic pump shear*
- *Increases control over the spray solution from the nozzle to the target plant*
- *Protects environmentally sensitive areas by reducing off target movement*
- *Reduces applicator exposure to harmful pesticides by reducing drift*

3. On the Target- The large spray droplets necessary to get the spray solution to the target plant are also more susceptible to bouncing off the plant surface, which reduces product effectiveness. Border T&O addresses this problem by reducing droplet bounce and increasing product coverage and retention.

- *Natural polymer reduces the kinetic energy in the spray droplet that causes bounce, resulting in better retention of spray solution*
- *Surfactants in Border T&O enable the spray droplet to spread resulting in remarkable coverage and increased product effectiveness*