

Solutions for Drone Application

Tank-Mix adjuvants

AGRHO[®] AEROMATE 320



Progress beyond



DRONE SPRAYING CHALLENGES

- ✓ Evaporation
- ✓ Low spray volume
- Compatibility,
- Deposition,
- Efficacy



FEATURES & BENEFITS

- ✓ Bio-based drift reducing adjuvant
- ✓ Specifically designed for aerial applications.
- ✓ Helps to increase droplet size for drift reduction
- ✓ Improves deposition rate leading to improved overall spray efficacy

Primary attributes:

- Coverage
- Deposition
- Anti-drift
- Efficacy booster
- Good shelf-life
- Provide good tank mix compatibility with common agrochemical formulations

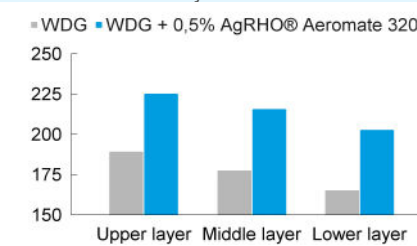
Recommended dose rate: 0,3-0,5%

DRONE FIELD TRIAL RESULTS

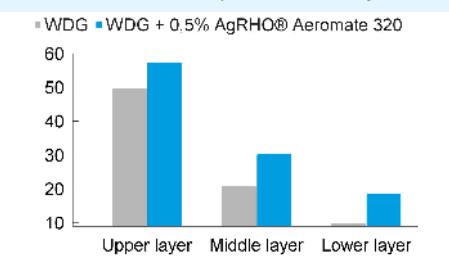
Experimental Conditions

- Crop: paddy
- Pesticide: Commercial 35% Chlorantraniliprole WDG
- Target insect: rice leaf roller
- Application concentration: Pesticide = 4.1 fl.oz/acre; Adjuvant = 2.05 or 4.1 fl.oz/acre
- Note: Water 410 fl.oz/acre; adjuvant concentration: 0,5% & 1%
- Drone setting: DJI Agras T30; nozzle type: SX11001VS; flight height: 3m, flight speed: 4m/s

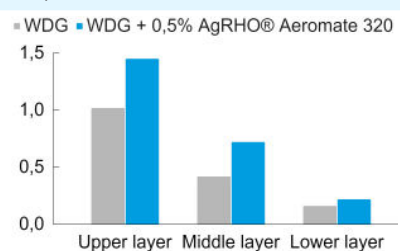
Droplet density (droplet: cm⁻²) - 0,5% adjuvant



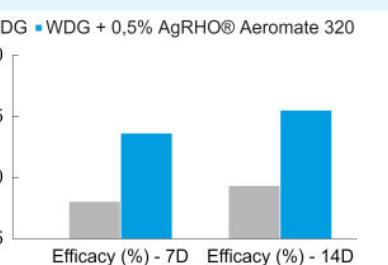
Particle size DV50 (µm) - 0,5% adjuvant



Deposition (µg/cm²) - 0,5% adjuvant



Efficacy (%) - 0,5% adjuvant



Conclusions

Comparing with insecticide WDG without adjuvants, AgRHO[®] Aeromate 320 showed up to:

- ≥ 30% increase in droplet density
- > 40% increase in deposition

- ~ 10µm increase in D50 of particle size
- > 10% increase in efficacy

With these results, we can expect significant drift reduction, good coverage, higher penetration and ultimately higher spray efficacy.