



PTIMA

Redefining Pest Management - a Holistic Approach

Best Management Practices guidelines

Use and set up of smart sprayers For the Vineyard Downy Mildew case study

01 Consider variable air flow rate systems

- Almost all fans currently mounted on air-assisted sprayers offer limited adjustment options, so a short range of air flow rates is generally possible
- The adoption of more advanced devices, such as diaphragms or hydraulic /electric fans enables to fine tune the air flow rate even on the go
- Air flow modulation according to target characteristics (e.g. canopy density) increases deposition and reduces spray drift



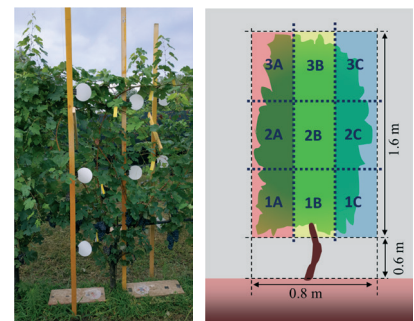
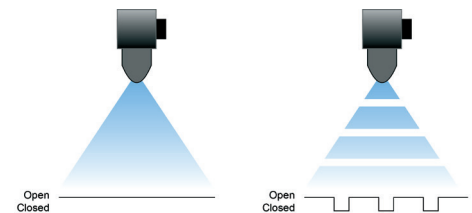
02 Adjust air support to the canopy target and canopy density

- Air assistance moves and lifts the foliage, thus improving spray penetration, deposition and coverage, including the underside of the leaves
- Excessive air flow rates should be avoided as they may blow the droplets through the trees owing to canopy compression
- If present, air deflectors should be adjusted to match the canopy and symmetry in air flow rate on both sprayer sides



03 Match spray distribution to the canopy to avoid spray losses

- PPP application aims to deliver the minimum amount of active ingredient to achieve the desired biological effect, precisely, uniformly and exclusively to the target
- PPP losses, under- and over- application and inadequate coverage and deposition should be avoided to safeguard the environment, food safety and human health
- Adjust the number of nozzles, spray angle, nozzle spacing and distance to the target to match spray distribution to the target zone/canopy and avoid spray losses
- The use of off-center nozzles is encouraged when appropriate



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