





# TRAINING ON ANTAM STANDARD CODE For TESTING OF KNAPSACK MISTERS CUM DUSTERS

**PART 2 : Plant Protection Spray Application Techniques** 

16 - 28 October 2016, Nanjing China

**2nd Training of Trainers on ANTAM Codes Organized by ANTAM and CAMTC** 





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- Aerial sprayers (Fixed wings, helicopter)
- + High Productivity (large surface less time)
- Cost, maintenance, logistics
- Bystanders, residents

#### Reference standards :

EN ISO 16119-5 (new sprayers)

EN ISO 16 122-5 (sprayers in use)

<u>Unmanned Aerial Vehicle</u> (mono or multi rotor)













#### Boom sprayers

- + Uniform application
- Cost, min field size

#### Reference standards

ISO 5682 - 1/2/3: flow and boom distribution EN ISO  $16119\ 1-2$ : Specifications for new sprayers EN ISO  $16\ 122\ 1-2$ : Specification for sprayers in use





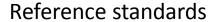








- Bush and tree crop sprayers
- + long distance spraying
- Drift



EN ISO 16119 3 : Specifications for new sprayers

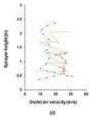
EN ISO 16 122 3 : Specification for sprayers in use

















- Lance & gun sprayers
- + long distance spraying
- Dosage









Portable sprayers : Handheld

Maintained pressure/Lance

In general not a professional use

No reference standard on specifications and test methods









Portable sprayers: Knapsack lever operated

Lever operated Pressure regulator

Reference standards

ISO 19932-1: safety requirements

ISO 19932-2: test methods















 <u>Portable sprayers</u>: <u>Knapsack motorized sprayers</u> (Mister cu Duster)

Electrical or petrol engine driven
Air pressure driven
Mister and/or duster
Optional boom or rotary CDA nozzle

Reference standard ISO 10988: test methods and performance limits

















Fixed and semi-mobile sprayers: green houses

Electrical or petrol engine driven
Air pressure driven
Mister and/or duster

Reference standard

EN ISO 16119-4: new sprayers

EN ISO 16122-4: sprayers in use











Granulators, slug pellet applicators and dusters













Granulators, slug pellet applicators and dusters







Train sprayers

No reference standard











Other pesticide application equipments

Soil desinfection

Seed coating









