

## Safe, effective control of Common foliar pests & Pathogens



# AGRI 50™

### DESCRIPTION

AGRI 50™ PRODUCTS introduces Agri 50™ an INSECTICIDE/ FUNGICIDE with contact activity against a number of challenging pest species.

Agri 50™ is a suspension concentrate that has a physical mode of action for use on greenhouse and field food crops and ornamentals. Agri 50™ is developed using proprietary formulation technologies to suffocate foliar pests such as white flies, aphids, and spider mites as well some fungal pathogens, without harming plants. The result is a safe, effective pesticide delivering cost-effective control of many hard to kill foliar insects and pathogens.

### Product Features:

- Exempt from food tolerances
- Fits into integrated pest management programs (IPM)
- Can be integrated with natural enemies and pollinators
- Ideal for resistance management programs

Agri 50™ is chemically stable, non-flammable, and requires no special handling or storage conditions. Agri 50™ is currently registered in China.



### Performance against foliar pests....

#### Laboratory Trials:

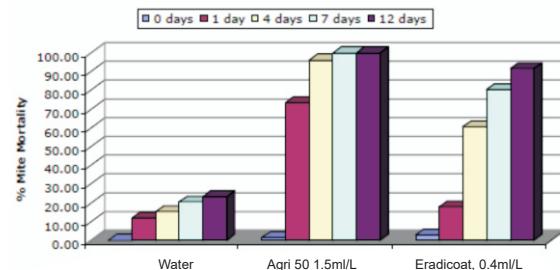
##### Agri 50™ efficacy against sweet potato whitefly (*Bemisia tabaci*) and two-spot spider mite (*Tetranychus urticae*).

Independent laboratory study of Agri 50™ against greenhouse whitefly, melon aphid and red spider mite in petri dishes. A complete random block design with six treatment and three replicates was used in this study. Leaf disks cut from these plants were used in bioassays. Insects and mite colonies were maintained in separate cages on potted plants in controlled greenhouses. Leaf disks were dipped in testing products at label rate of 1.5ml/L Agri 50™, 0.4ml/L Enidor and "water only" as control. Mortalities were scored 0, 1, 4, 7 and 12 days after treatment.

#### Enviro-controlled Laboratory tests:

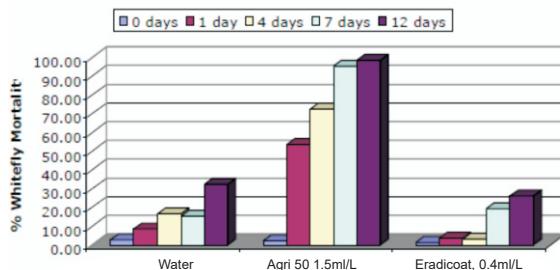
This single laboratory test performed in Morocco resulted in mortality of a spider mite pest, *Tetranychus urticae*, over 90 percent as early as 4 days after one application of Agri 50™.

##### Effects of Agri 50™ on *Tetranychus urticae*, 12 days after Treatment



On another major pest, sweet potato whitefly (*Bemisia tabaci*), performance tests against nymphs and pupa resulted in Agri 50™ to be effective against all immature stages, (excluding egg stage), greatly exceeding in performance than Enidor, a standard commercial pesticide.

##### Effects of Agri 50™ on *Bemisia tabaci* nymphs and pupae, 12 days after Treatment



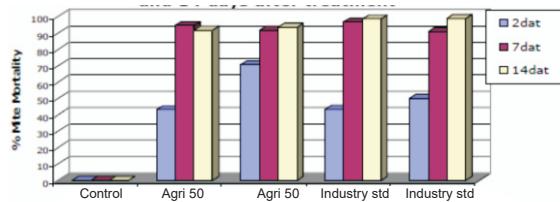
Principal Investigator: Abdelhaq Hanafi, Agadir, Morocco 2005

#### Field Performance:

##### Agri 50™ efficacy against *Tetranychus urticae*.

In a field test of the efficacy of Agri 50™ against two-spot spider mite on cucumber also achieved promising results, with 70% mitemortality at 2 days and over 90% mortality reached at 7 days after treatment. This was over 20% higher control than industry standards at 2 days after treatment.

##### Efficacy of Agri 50™ on *Tetranychus urticae*, at 2, 7 and 14 days after treatment



Wong, Institute of Agricultural Science; Dept. of Plant Protection Yen-Tai City, China Oct. 2006

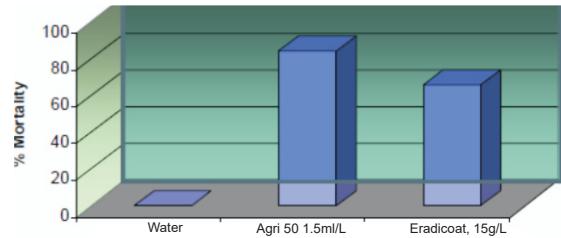
## Field Performance:

### Efficacy of Agri 50™ against the rose Aphid Macrosiphum rosae (Linnaeus).

This trial evaluated the efficiency of Agri 50™ at controlling the rose aphid, Macrosiphum rosae, and compared the results to a commercial standard and a water treated control. Mortalities were recorded 7 days after treatment. This independent greenhouse study showed that Agri 50™ provided significant control of rose aphid. Furthermore, the study found no evidence of phytotoxic damage to the rose bush.



Effect of Agri 50™ on Macrosiphum rosae, 7 days after treatment



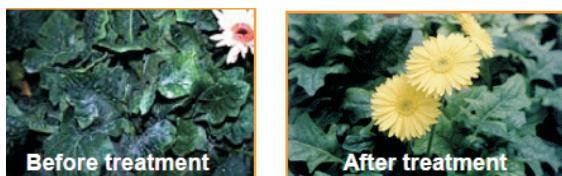
John Innes Centre, February 2005

### Performance against foliar pathogen

#### Greenhouse Performance:

##### Evaluation of Agri 50™ as an fungicide on powdery mildew, Oidium sp., on Gerbera daisy, Gerbera jamesonii.

This trial evaluated the curative-fungicidal effect of Agri 50™ on powdery mildew on an ornamental plant. Gerbera daisy Gerbera jamesonii were transplanted with commercial potting mix and time-release fertilizer and inoculated three days later with the powdery mildew pathogen, by placing infected plants throughout the experimental area. Agri 50™ treatments were applied by foliar spray at 10- day intervals. After 50 days the results for this study indicated that Agri 50™ at even the lowest rate, provided significant control for powdery mildew.



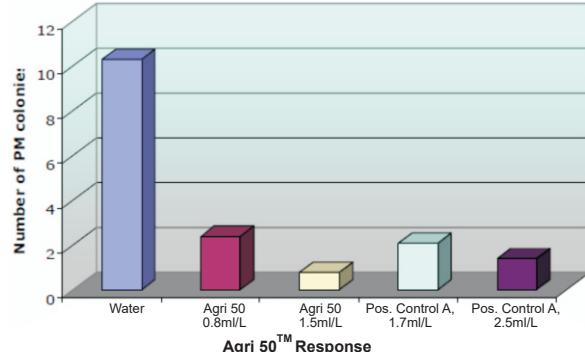
**Sineria**

Randwycksingel 20-A015,  
6229 EE Maastricht, The Netherlands  
info@sineria.com / www.sineria.com



The graph below shows the dosage response for Agri 50™.

#### Effect of Agri 50™ on Powdery Mildew Disease Severity



Chase Research Gardens, Sept 2005

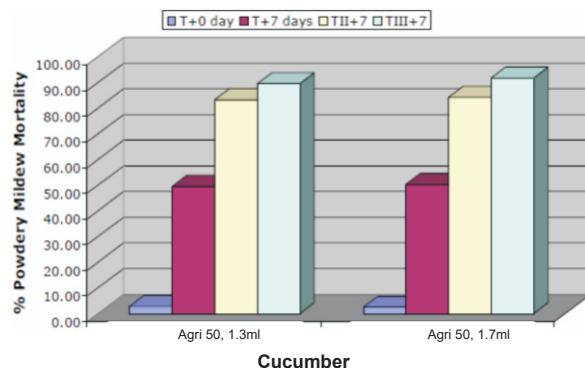
In addition, plant safety was also evaluated for this study. After three applications, the Agri 50™ treated plants were salable and not-significantly different than the Control plants.

#### Field Performance:

##### Field evaluation of Agri 50™ as fungicide for powdery mildew on cucumbers.

This field trial performed in Yen-tai, China evaluated the efficacy of Agri 50™ on cucumber against powdery mildew. Four replicates were treated for each treatment, Agri 50™ was applied at intervals of 7 days. Observations were made 7 days after each treatment. The severity of powdery mildew infection was recorded and entered for statistical analysis. Agri 50™ showed 91.55% efficacy 7 days after final treatment.

#### Effects of Timing of Agri 50™ on Eradication of Powdery Mildew on Cucumber



Wong, Institute of Agricultural Science; Dept. of Plant Protection Yen-Tai City, China Oct. 2006