Harvesting Nature's Science





## Efficacy of HUMA GRO® PROUD 3® to Control Whitefly on Verbena

Research by Lucia Villavicencio, PhD Center for Applied Horticultural Research, CA

# **Research Report**

#### Summary

Several commercial products, including Proud 3<sup>®</sup> were evaluated to manage whitefly (Bemisia B-biotype) on Verbena 'Superbena<sup>®</sup> Royale Peechy Keen'. On weeks 4, 5, and 6 of the trial, the number of nymphs and adult whiteflies was lower in plants treated with PROUD 3<sup>®</sup> than the untreated controls (UTC). No phytotoxicity was observed during this trial.

## Description

The trial was conducted with six replicates per treatment in a climate-controlled greenhouse with set points of 65/75°F night/day temperature and under natural irradiance and photoperiod. PROUD 3<sup>®</sup> was applied by foliar application at a dilution rate of 1:100, weeks 0-4. The adults and nymphs were counted prior to treatment application and once a week for a total of 7 weeks.

To count the number of adults, each plant was carefully lifted immediately before treatment application, and the adults were counted on the underside of all leaves. To count the number of nymphs, two fully extended leaves were excised from the lower section of each plant and brought to the laboratory for enumeration using a stereomicroscope.

The mean number of whitefly nymphs and adults in the Verbena plants treated with PROUD 3<sup>®</sup>, and the untreated controls (UTC) were presented in Figures 1 and 2, respectively, during weeks 4-6.



Photo of Whitefly Nymphs by Futureco Bioscience



Photo of Whitefly Adults by Visuals Unlimited



#### HUMA GRO® PROUD 3® to Control Whitefly on Verbena



Figure 1. Number of whitefly nymphs during weeks 4-6



Figure 2. Number of whitefly adults during weeks 4-6

### **Results**

During the 4th, 5th, and 6th weeks of the trial, the number of whitefly (Bemisia B-biotype) nymphs and adults were lower by 3 to 8 times in the Verbena plants treated with the OMRI-listed PROUD 3<sup>®</sup> product than in the untreated controls.

Full research report available upon request.

PROUD 3<sup>®</sup> organic pest control is a safe, effective, organic foliar applied bactericide, insecticide, miticide and fungicide, when applied using recommended methods and rates. PROUD 3<sup>®</sup> is OMRI-listed for organic farming.



Our HUMA GRO<sup>®</sup> Products Are Highly Efficient and Effective Due to Our Unique Delivery System

If you would like to learn more about this top quality product, contact us directly at 800-961-1220 or visit our website at www.humagro.com.