# Using Osmocote<sup>®</sup> Bloom in propagation and production<sup>©</sup>

## T. Bosma<sup>a</sup>

ICL Specialty Fertilizer, 1045 Woodspointe SW, Byron, Michigan 49315 USA.

#### SUMMARY

A series of trials were conducted at commercial growers to show the feasibility and benefits of using Osmocote<sup>®</sup> Bloom mini-prill in commercial production. Osmocote<sup>®</sup> Bloom encouraged faster, stronger root development, resulting in more compact, consistently sized plants. Additionally Osmocote<sup>®</sup> Bloom proved to be cost efficient, reduced nutrient run-of and provided constant steady feeding even after product cycle.

### PLANT GROWTH TRIALS

Research and trial results demonstrate Osmocote<sup>®</sup> Bloom produces a plant response equal to or better than water soluble fertilizer (WSF) in a wide variety of plant types including geranium, petunia, verbena, and cyclamen (Figure 1). With liners Osmocote<sup>®</sup> Bloom compared favorably to WSF treatment during production and after liners rooted Osmocote<sup>®</sup> Bloom continued to feed the liner when WSF was cut off (Figure 2).



Figure 1. Comparison of Osmocote<sup>®</sup> Bloom and water soluble fertilizer on the growth of four different plants (*Geranium*, *Petunia*, *Verbena*, and *Cyclamen*).

<sup>&</sup>lt;sup>a</sup>E-mail: tom.bosma@icl-group.com

# Harvest



WSF 200 ppm N

3 lb/cu yd Osmocote Bloom + 200 ppm N



# 2 weeks after harvest-clear water



Figure 2. Growth of rooted liners (top: at harvest; bottom 2 weeks after harvest).

A commercial pansy trial compared Osmocote<sup>®</sup> Bloom at 3 lbs. per cu yard vs. WSF. The grower reported back some very positive results: bigger pansy (*Viola*) plants, 15-20% more blooms, at least a 25% reduction in production time, and a significant savings in the total fertilizer cost.

## **REDUCED NUTRIENT RUN-OFF**

Osmocote<sup>®</sup> Bloom showed a 64% lower N and 84% lower P leaching than with WSF and a 59% lower P leaching than with standard organic fertilizer (Figure 3).



Figure 3. Leaching of nitrogen (N) and phosphorus (P) during and 8 week trial.

#### **OSMOCOTE® BLOOM: WHAT IS IT**

Osmocote<sup>®</sup> Bloom is 100% coated and contains a complete package of N-P-K, blended with magnesium and essential micronutrients. It is available in 2-3 month and 5-6 month longevities. A key feature is smaller prills or particles. The prill is about 1/5 the size of a standard Osmocote<sup>®</sup> prill. This smaller size provides better uniformity and even distribution of nutrition in smaller containers, optimizing plant utilization.