



Huma[®] MicroMate Humic Acid Makes More Blooms, Faster, on Commercial Petunias

Research Report

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 Huma[®] Product: MicroMate

Objective

Speeding up the maturity timing of flowers and having more flowers on commercial ornamental plants will make them more marketable and help flower growers produce more potted flower plants per year. The focus of this study was to assess the effects of a natural humic product from Huma[®] called **Micromate** on the speed of maturity and number of flowers for petunias.

Materials & Methods

Soil-less growing media (80% peat, 20% perlite with pH 5.5) was placed in 6-inch pots, after which 4-week-old petunia "Picobella Blue" seedlings were transplanted into them. Beginning one day after transplanting, four different treatments were applied weekly to the seedlings as a 150 mL drench. Each treatment included 12 pots (Table 1). The experimental design was a randomized complete block set up.

Table 1. Amount of **MicroMate** Applied to petunias

Treatment No.	Treatment Type	Amount	Application Method
1 (Check)	Control (50 ppm N in 20-3-19 blend)	–	Drench
2 (Huma [®])	MicroMate + Control	5 g/L	Drench
3 (Huma [®])	MicroMate + Control	10 g/L	Drench
4 (Huma [®])	MicroMate + Control	20 g/L	Drench
5 (Huma [®])	MicroMate + Control	40 g/L	Drench

Results

The Huma[®] **MicroMate** humic liquid suspension enhanced the maturity rate and increased the number

of flowers on petunia plants (Photo 1). Generally, higher amounts of **MicroMate** contributed to faster maturity and a larger number of flowers in petunia. **MicroMate** applied at 40 g/L sped up flowering the most (6 days sooner) and produced the largest average number of flowers (13). See Table 2.

Table 2. Effects of **MicroMate** on time of maturity and number of petunia flowers

Treatment No.	Average No. of Flowers	Days to First Flower, Compared to Check
1 (Check)	4	–
2 (Huma [®]), 5 g/L	10	3 days sooner
3 (Huma [®]), 10 g/L	11	3 days sooner
4 (Huma [®]), 20 g/L	9	6 days sooner
5 (Huma [®]), 40 g/L	13	6 days sooner

Conclusions

The average number of flowers on petunia plants can be doubled by adding a humic substance such as Huma[®] **MicroMate** to the growing medium.

Product Description

Huma[®] MicroMate employs a unique micronizing technology and is designed for suspension in a liquid to deliver the maximum possible concentration of humic and fulvic acids, plus a clay/mineral suspension agent. Huma[®] MicroMate uses the advantage of its tremendous surface area to more readily improve plants and soil. Huma[®] MicroMate is non-toxic and safe to handle. The product's natural pH of 3.7 enables it to be safely used in all types of agriculture and horticulture settings.



Photo 1. **MicroMate** effects on the appearance of first flowers and number of flowers on petunia.