

# Phytotoxicity of Biocontrol-compatible Dip Solutions for Pest Control on Cuttings Before Sticking

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## Summary of Test and Results:

Low concentrations of BotaniGard, SuffOil, and M-Pede were tested for phytotoxicity to the cuttings of 28 cultivars of greenhouse-grown flowers. The cuttings were immersed and gently shaken in the test solutions for 10 seconds. Cuttings were planted within 20 minutes of being dipped.

- 1 Control
- 2 BotaniGard 22WP 1.25 gt/L 23.7 g/5 gal
- 3 SuffOil 0.10% 18.9 ml/5 gal
- 4 M-Pede 0.50% 94.7 ml/5 gal
- 5 A combination of BotaniGard, SuffOil and M-Pede at the rates listed above

Four of the 28 plant types tested showed no significant differences in phytotoxicity symptoms due to the dip procedure. The four plant types affected, and the symptoms observed are listed below:

**Plant type number 13: *Geranium zonal* ‘Sunrise Hot Pink’.** Both SuffOil and the combination treatment caused some necrosis and stunting at 9 – 14 days after treatment. Ratings were 2.0 and 3.0 for the SuffOil and Combo treatments, respectively. No significant differences were observed at 20 – 30 days after treatment.

**Plant type number 18: *Ipomea* ‘Solar Power Black’.** SuffOil caused a low level of leaf necrosis at 9 days after treatment. No differences were observed from day 14 to 30.

**Plant type number 19: *Lantana* ‘Little Lucky Pot of Gold’.** Moderate to severe necrosis and stunting observed 9 – 14 days after treatment. No differences observed at 20 – 30 days after treatment.

**Plant type number 25: *Petunia* ‘Headliner Violet Dark Eye’.** Botanigard, M-Pede, SuffOil and the combination treatment all suppressed flowering. Flowering was reduced by an average of 50% at days 14 – 30 post treatment.