

How We Do it at Our Place: Using GA on Microcuttings

by Liz Dunham

When things don't go your way, it's important to remember all the tools in your toolbox. We had planted 4,000 *Syringa meyeri* microcuttings but they proceeded to root and then just sit there. We waited for some growth, and then waited some more. Finally we had had it; it was time to bring in enforcements of the hormone tools.

We had used GA, (Gibberellic Acid/ GA₃) a few times in the greenhouse to get *Amelanchier* to break their winter dormancy. We have also used it in our tissue culture lab (on various plants) to get node elongation which leads to more cuttings and better multiplication for production. We saw no reason why GA would not help in this case of the *Syringa* as we wanted to get more tip growth and node elongation.

We sprayed the cuttings, which were already rooted, and had been planted 2-3 weeks prior, with a 100 ppm solution of GA with surfactant. We sprayed them twice, about four days between the applications. We started to see nice tip growth with in the week of spaying the cuttings. We were then able to take cuttings from the original Syringa we had treated and these second generation cuttings rooted easily and also produced nice tip growth without any GA treatments. Success! We met our order!



Syringa in culture



Syringa in culture with GA.



Cuttings 2 rounds
GA



Tip cuttings rooted
from cuttings sprayed
with GA



Gibberellic Acid



GA Sprayer

Liz Dunham is Vice President of Knight Hollow Nursery, a wholesale micropropagation lab located in Middleton, Wisconsin. Knight Hollow Nursery offers high quality and unique cloning services to the nursery industry throughout the U.S. and occasionally foreign countries. It was founded by Dr. Deborah McCown and Dr. Brent McCown in 1981. KHN accepts proprietary contracts from private firms, arboreta and U.S. Government agencies.