

# PLASTIC MESH TUBES CONSTRICT BLACK WALNUT ROOT DEVELOPMENT AFTER TWO YEARS

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In the spring of 1969, I planted some black walnut seed in 2-inch by 10-inch plastic mesh tubes that contained a medium of one-part soil and three-parts vermiculite. The seed were from a local source and were pit stratified over winter. Twenty-seven tubelings were planted in a test plot on July 8, 1969, at the Southern Michigan State Nursery. As of July 8, 1971, 25 seedlings, or 95 percent, survived.

The height growth of the seedlings averaged 2 to 2 1/2 feet, and stem diameter 16/32 to 20/32. A 2 1/2-foot, 20/32 diameter seedling was lifted July 8, 1971, to check the root development and breakdown of the plastic tube (figures I and 2).

After 2 years, the breakdown of that portion of the tube above ground was good, but there was no breakdown of the underground portion. The tube was broken by the roots growing through the tube in some places; however, there was constriction of the roots. The



**Figure 1.-An average size black walnut after 2 years growth in plastic mesh tube.**