Propagation of *Phoenix dactylifera* Cultivars©

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Date palms are one the world's oldest cultivated crops, literally going back for several millennia. Two methods have traditionally been used for propagation; one sexual and one asexual. Sexual propagation from seeds has value for production of landscape palms and for breeding purposes for new cultivars. However, being dioecious in nature and due to the great genetic diversity of this plant when grown as a fruit crop asexual propagation from offshoots (small shoots growing from the trunk of the mother palm) has proven to be the most reliable method to keep fruit cultivars true to variety. As a woody monocotyledon date palms cannot be propagated by grafting.

A newer method of asexual propagation of date palms is tissue culture. This is still a controversial procedure as there are two distinct schools of thought regarding this procedure. One school being that it is a viable procedure greatly reducing the time required to come into fruit production as well as keeping the cultivar true to variety.

The other school of thought being that with this method of propagation they do not stay true to type. Both schools are recognized by equally credible authorities. Having no direct experience with this newer method of propagation I do not feel qualified to render a professional opinion either way.

Vegetative Propagation of Southwestern Plants: *Ambrosia deltoidea, Buddleja marrubifolia, Vauquelinia californica,* and *Vauquelinia corymbosa*©

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INTRODUCTION

Vegetative propagation of four species native to the Southwestern United States is described in the following experiments. *Buddleja marrubifolia* is a dependable shrub for the arid landscape because it tolerates poor soil, drought, and heat. The wooly butterfly bush is known to root from softwood cuttings during springtime when treated with IBA at 5000 ppm and in summer when treated with IBA at 3000 ppm (Nokes, 2001). Hardwood cuttings of some *Buddleja* species have been reported to root when taken in winter. *Vauquelinia californica* is a popular landscape shrub with evergreen, leathery leaves. Propagation by cutting is preferred, but rooting of cuttings has proven recalcitrant (Charles, 1961; Dehgan et al., 1977). Differences in rooting were found in response to season, clone, and IBA treatments, with no one treatment consistently superior (Smith, 1982). *Vauquelinia corymbosa*, an evergreen shrub with leaves narrower than those of *V. californica*, is currently underutilized