New Development of Graft Between a Select Scion and Durable Weed Root Systems To Form a Productive Hybrid

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The purpose of this project was to determine if a hardy rootstock system may be grafted with a productive branch scion to form a productive hybrid. Russian Olive trees are known to be very suitable for harsh climates and poor soil conditions. In the intermountain and northwestern climate, Russian Olive trees do not yield olives or any useful product. Mulberry tree root systems are very similar to Russian Olive root systems but the mulberry tree performs best in well rainfed soils. Mulberry trees produce fruit that can be harvested to eat. Livestock and big game animals also eat the branches and leaves of mulberry trees. The only food source able to sustain silkworms is mulberry leaves. It was hypothesized that the hardy rootstock and branch scion would successfully graft offering many benefits. Both root stocks and branch scions were collected and prepared. The rootstock and branch scion were grafted in a greenhouse during late fall and early winter. The grafted trees were watered and observed daily. Based on the data collected, the hypothesis was true as a direct result that the mulberry scion is still alive and healthy. With these successfully grafted trees more experiments can be done to test the productivity, successful rate and the durability of the grafted tree in various climates and soil conditions.

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