

Supplemental Methods

This section provides detailed methodological information that supplements Section ??.

S1.1 Extended Grafting Techniques

S1.1.1 Approach Grafting

Approach grafting (also called inarching) involves joining two growing plants while both remain on their own roots, then severing the scion from its roots after union formation. This technique is particularly useful for difficult-to-graft species or when precise alignment is challenging.

Procedure: 1. Select healthy rootstock and scion plants in close proximity 2. Make matching cuts on both plants (30-40° angle) 3. Align cambium layers and secure together 4. Allow union to form over 4-8 weeks 5. Gradually reduce scion root system 6. Sever scion from its roots after full union establishment

Success Rate: 70-80% for compatible species, 50-60% for difficult combinations

S1.1.2 Bridge Grafting