

## **SOMATIC HYBRIDIZATION OF AVOCADO**

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High levels of resistance to *Phytophthora* root rot (PRR) do not exist in *Persea americana*, although related species in the subgenus *Eriodaphne* appear to be very resistant to this disease. Unfortunately, species in the subgenus *Eriodaphne* are sexually and graft-incompatible with avocado, and so this source of resistance to PRR is unavailable for rootstock development. Somatic hybridization involves the production of artificial hybrids using a procedure that involves the forced fusion of protoplasts of different plant species. In vitro procedures that can enable the production of somatic hybrids between the avocado and species in subgenus *Eriodaphne* have been developed and plants have been regenerated. Genetic transformation is also being utilized to transfer "pathogenesis-related" genes into avocado from other species. Using these procedures, it is anticipated that a new generation of avocado rootstocks with high levels of resistance to PRR will be available.