

# The economics of truffle cultivation

Cary Shott | Apr 12, 2012

Each year, more vintners are adding truffle orchards to their vineyard properties and many more are giving the idea serious consideration.

Truffle orchards are highly profitable and are an excellent and viable way to diversify land usage, said American Truffle Company Managing Director Robert Chang.

At January's Napa Truffle Festival, Chang said that Napa and Sonoma counties offer particularly suitable climates and soil.

"With proper scientific methodology, European truffles can be cultivated here in North America, and many have started what's destined to be highly productive and profitable truffle orchards," Chang said.

The demand for black truffles, the most sought-after truffles for culinary purposes, far exceeds supply. They are treasured for their unique flavor and aroma and command very high prices: up to \$1,000 per pound, wholesale.

"Soon, chefs in North America will be able to get black truffles from farm to kitchen in a matter of hours, instead of days as is currently the case with imported European truffles," he said.

Truffles are essentially underground mushrooms that grow on the roots of specific trees. Black truffles develop most successfully on oak and hazel trees.

Historically, black truffle cultivation has been almost exclusively a European venture, with truffles grown predominately in France, Spain and Italy. But that is changing.

Black truffles are now being cultivated in a variety of climates and countries around the world, including Australia, South Africa, Canada and the United States.

## Cultivation

"There are many myths and misinformation in the public domain and on the Internet, when it comes to truffle cultivation," Chang said.



San Francisco resident Bill Collins with his truffle hunting dog, Rico, walking through Robert Sinskey's two-year-old truffle orchard in Los Caneros. Cary Scott/The Weekly Calistogan photos

"The only way to reliably set up one's truffle orchard for success and consistently achieve high yields is to rely on rigorous science," he said.

The science that he referred to revolves primarily around climate and soil conditions.

Average monthly temperatures and seasonal rainfall are significant considerations when contemplating a truffle orchard.

Ideally, the coldest month should have average temperatures between 35-45 degrees, and the warmest month should average 62-74 degrees. ATC says that warmer summer temperatures can be mitigated with row-orientation, tree densities and irrigation.

Spring and summer rainfall is believed to have the biggest single influence on truffle yield, but irrigation can bridge the gap in drier climates such as Napa Valley.

The viability of a truffle orchard is also highly dependent on free-draining soil with pH levels of 7.6-7.9, higher than what is commonly found in Napa Valley.

Visit: [www.americantruffle.com](http://www.americantruffle.com)