

Wine in China, Grapevine Fanleaf Disease, Grapevine Moth

Posted by steven.reynolds | May 20, 2010

WSU Economists Explore the Chinese Market for Wine

Economists at Washington State University are investigating ways to market Washington wine to the growing Chinese consumer market.

The research consists of examining Chinese preferences for wine from different countries coupled with economic experiments, said economics professor Jill McCluskey.



“It is important to understand Chinese consumers’ preferences so the United States can enter this growing market,” McCluskey said. “There is great potential within this market.”

China is one of the most populous nations in the world, and currently, per capita wine consumption within China is at 0.3 liters. This is meager in comparison with France and the United States, which are set at 59 liters per year and 12 liters per year, respectively.

“If per capita wine consumption in China rose by just 0.1 liters per year, that would mean consumption would rise by 100 million liters,” said Hainan Wang, a graduate student who assisted McCluskey in the study. “There is so much potential to create incredible profits by marketing wine to China.”

Currently, Chinese consumers perceive wine as stylish and prestigious. The Chinese prefer imported wine, and there is a preference for French wine among consumers, McCluskey said.

“The Chinese market has shown a huge inclination towards French wine,” McCluskey said. “If you look at the wine on the grocery shelves in China, it is mostly comprised of French wines. Wine is a product you develop a taste for, so consequentially, the Chinese consumers have developed a taste for the French wines.”

In a study conducted by McCluskey and Wang, an auction was held to determine willingness to pay for imported wines amongst domestic consumers. The study found the largest willingness to pay among consumers for French wines, followed by wines from Australia and the United States. The wines which held the lowest willingness to pay were domestically produced Chinese wines.

“It is interesting because, in China, domestically produced wine has a reputation for poor quality,” Wang said. “The interest among the consumer is mostly in imported wine, which is where wine produced in the United States gains an advantage.”

McCluskey said wines from the United States have the potential to capture a significant portion of the Chinese market if effective marketing strategies are applied.

“Right now, Chinese consumers tend to buy French wine, but they are not buying the wine, they are buying the identity French wine conveys,” McCluskey said. “If the United States could establish this identity, then these wines could prosper in this market.”

by Kathryn R. Sullivan,
Marketing, News, and Educational Communications intern

Learn more about research in WSU’s School of Economic Sciences by visiting <http://bit.ly/aHNCXi>.

Grapevine Fanleaf Disease Detected in Washington Vineyards

WSU virologist Naidu Rayapati reports that one of the most devastating diseases of grapevines has been detected in Washington.

Grapevine fanleaf, an infectious degeneration disease, can cripple infected

grapevine with misshapen leaves, short internodes, zigzag growth of canes, and poor berry set.

The disease also has detrimental effect on fruit yield and quality, and longevity of grapevines. All cultivars of wine grapes are susceptible to the disease and severe economic damage with yield losses up to 80 percent have been recorded in many sensitive cultivars.

Grapevine fanleaf is the oldest known virus disease of grapevines. It is believed that the virus originated in ancient Persia and spread to other grape-growing regions via transport of vine cuttings.

And that appears to be the case in Washington. To date, fanleaf disease has been observed in Washington vineyards in four wine grape cultivars: Pinot Noir, Merlot, Cabernet Franc and Chardonnay. Since these cultivars were planted in different years in geographically distinct vineyard blocks by unrelated growers, it is likely that infected planting materials were introduced from multiple sources.

In Pinot Noir, infected grapevines showed a broad range of symptoms consisting of fan-shaped leaves mimicking the “lady’s fan” (and hence the name of the disease) with toothed margins, vein-banding and yellow mosaic symptoms (Figure 1). In Chardonnay, infected grapevines showed fan-shaped leaves and yellow mosaic symptoms, but not vein banding symptoms (Figure 2). In both cases, infected grapevines produced small clusters with poor fruit set, irregular ripening and shot berries (Figure 3 a and b). Although fanleaf disease has so far been detected only in Washington vineyards, the virus is likely to be present in Oregon and Idaho vineyards.

Unlike grapevine leafroll disease (see *Voice of the*



Fig. 1



Fig. 2



Fig. 3a



Fig. 3b



Fig. 4

Symptoms and effects of

Vine (<http://bit.ly/apzpxa> for more information), grapevine fanleaf disease fanleaf is a soil-borne viral disease and is transmitted by the soil-inhabiting plant-parasitic dagger nematode (*Xiphinema index*). The spread of the virus occurs by two principal modes: grapevine-to-grapevine spread in the vineyard by the nematode vector and long-distance spread through the distribution of cuttings from infected grapevines.

While fungal diseases such as powdery mildew that can be controlled by timely and judicious applications of fungicides, there are no curative measures to treat fanleaf virus-infected grapevines.

Because there is no credible evidence that the dagger nematode vector is present in Washington, it is reasonable to assume that fanleaf disease is being spread by infected cuttings. For Washington growers, then, a best management practice should consist of roguing and replanting with virus-tested cuttings as a strategy for eradicating the disease from virus-infested vineyard blocks. And planting new vineyards with virus-tested planting materials is one of the most critical decisions that a grower will live with for the life of the vineyard. Procuring planting material from reliable sources like certified nurseries deserves careful consideration.

Rayapati noted that although fanleaf has been positively detected in Washington vineyards it is also very likely present in Oregon and Idaho, as well. The disease has been found in California vineyards. Dagger nematodes are also present in California vineyards.

For more information about grapevine virus disease, please visit <http://bit.ly/aR2rfU> or contact WSU grape virologist Dr. Naidu Rayapati directly: email: naidu@wsu.edu; phone: 509-786-9216 or cell: 509-788-5350.

Pest Detectives Scrambling to Keep Grapevine Moth Out of Washington Vineyards

Voice of the Vine recently had the chance to talk to John Lundberg, the public information officer for the Washington State Department of Agriculture Pest Program, about WSDA's upcoming grape moth summer trapping program

Q: What kind of new trapping program is WSDA conducting for the first time this summer?



European grapevine moth

We're trapping for four moths that could damage Washington grapes and other food crops. The pests have not been detected in Washington to date, and we want to keep them out. If the pests were to become established here, they could pose a very serious threat to Washington's grape-growing industry, the second largest in the U.S.

Of the four grape pests, the primary focus this summer will be on the European grapevine moth, detected for the first time in the U.S. in 2009 in California's Napa Valley. WSDA's goal is to deploy 1,500 European grapevine moth traps in Washington this summer. The traps will be checked regularly throughout the summer, and then taken down in September.

More than 30,000 European grapevine moths have reportedly been trapped in California. State officials are considering a quarantine of some California grape-growing regions as a result.

The other three pests WSDA will be trapping this summer are the light brown apple moth (LBAM), silver Y moth, and the false codling moth. The goal is to deploy 200 traps for each of these pests.

Q: Where will the traps be deployed?

Traps will be placed in all 11 of the state's major grape-growing regions or American Viticultural Areas. Some areas will be trapped more heavily than others.

Q: Where have these four grape pests been found in the U.S.?

The European grapevine moth was detected for the first time in 2009 in California.

The light brown apple moth (LBAM) was detected for the first time in mainland U.S. in 2007 in California (the moth was found earlier in Hawaii).



Damage caused by European grapevine moth, according to the UC Davis IPM Web site, includes "webbing and feeding inside berries and within bunches,

Silver Y moth, native to Australia, has not been found in the U.S. However, the climate in the Pacific Northwest is very similar to northern Europe where severe outbreaks have occurred. which become contaminated with frass (excrement)."

False codling moth, native to Ethiopia, has not been found in the U.S. However, the climate in southeast Washington, a major grape growing region, is very similar to Ethiopia where severe outbreaks have occurred.

Q: How are these four moths spread, and how could they get to Washington?

Like other agriculture pests, these four moths could be brought to Washington in fruit or attached to plants from infested areas. They could arrive on a preferred host like grapes, or on a number of other alternative host plants. Some of the grape pests have a large host list.

Q: What kind of other pest trapping programs does WSDA conduct on a regular basis?

One of the major tasks given to WSDA by the State Legislature is to conduct periodic surveys for pest insects, weeds, and plant diseases that could cause serious damage to the state's environment or to its agriculture, horticultural, nursery, and timber/forest industries. Among the major trapping programs currently being conducted by WSDA are ones for gypsy moth, apple maggot, Sudden Oak Death, spartina, Mediterranean snail, and Japanese beetle.

Practicing preventative "medicine" is one of the best ways to keep a vineyard healthy. For more information on healthy plant material for Pacific Northwest vineyards, please visit the Northwest Grape Foundation Service Web site at <http://bit.ly/9XUctK>.

For more information about European grapevine moth, please visit <http://bit.ly/dopfoE>.

Leave a Reply

You must be [logged in](#) to post a comment.

ABOUT

- [Executive Leadership](#)
- [CAHNRS Administration](#)
- [Locations](#)
- [Departments](#)
- [Latest News](#)
- [Learn About CAHNRS](#) ▶

ACADEMICS

- [Degrees](#)
- [Graduate Studies](#)
- [Scholarships](#)
- [Internships](#)
- [Careers & Clubs](#)
- [Visit Academics](#) ▶

RESEARCH

- [Centers & Facilities](#)
- [Grant Resources](#)
- [Intellectual Property](#)
- [Weekly Published Research](#)
- [Safety](#)
- [Visit Research](#) ▶

EXTENSION

- [About Extension Programs](#)
- [Publications](#)
- [Locations](#)
- [Impacts](#)
- [Visit Extension](#) ▶

ALUMNI

- [Where to Give](#)
- [Ways to Give](#)
- [Scholarship](#)
- [Donor Profiles](#)
- [ReConnect](#)
- [Magazine](#)
- [Connections](#)
- [Magazine](#)
- [Archive](#)
- [Visit Alumni](#) ▶

FACULTY & STAFF

- [Quick Links](#)
- [Business Services](#)
- [Budget & Finance Unit](#)
- [Civil Rights](#)
- [Compliance](#)
- [Strategic Planning](#)
- [Visit Faculty & Staff](#)
- ▶