

# **KOKI YOKOTSUKA**

## The Impact of ASEV on Wine Science and Winemaking in Japan



would like to express my sincerest gratitude for this American Society for Enology and Viticulture 2010 Merit Award, the highest honor that any educator, researcher, or producer of grape and wine can attain. I am very much humbled to be chosen as an awardee and would like to thank Dr. Christian Butzke, as President

along with the members of the Board of Directors, the Awards Committee, and all those involved in this honor. I am also profoundly grateful to the great mentor of my life, Dr. Vernon L. Singleton, Professor Emeritus at the University of California, Davis. Dr. Singleton has taught me so much since I first came to the United States in 1980, and his help was instrumental in launching ASEV Japan. The gratitude and respect I have for him go far beyond what words can say, so I will have to be content with simply saying, thank you. The ASEV staff, in particular Mrs. Lyndie M. Boulton, has shown extreme understanding of the Japanese members since the conception of ASEV Japan and has helped us in so many different ways. To Mrs. Boulton, I would like to extend my heartfelt thanks for the immeasurable support given to us.

# The State of Japanese Wine Prior to the Launch of ASEV Japan

It was in November 1970 that I ended a decade of student life at Tohoku University, located in northeastern Japan in the City of Sendai, and assumed the post of associate professor at the Institute of Enology and Viticulture, University of Yamanashi. The university is located in Kofu City, approximately 75 miles west of Tokyo in Yamanashi Prefecture's Kofu Valley, sheltered

ASEV is not responsible for statements or opinions printed herein; they represent the views of the author and are not binding on the ASEV as a whole.

Copyright © 2010 by American Society for Enology and Viticulture. All rights reserved.

from the Pacific Ocean by Mt. Fuji. At present, there are approximately 400 licensed wineries in Japan and 250 of them are active. With its 84 wineries, Yamanashi is the largest grape and wine producer in Japan, and our Institute is the only research and education body in the country devoted to winegrape and wine. The Institute has produced 540 graduates to date, many of whom are currently working in wineries throughout the country.

When I first arrived at the University of Yamanashi in 1970, Japan did not have a wine market to speak of. Grapes were grown as fruits for the table and the unsold surplus was made into wine. The varieties most often used for winemaking were Koshu, an Oriental-European variety particular to Japan, and the Japanese-bred Muscat Bailey A, a hybrid of Muscat Hamburg and Bailey varieties. These two are still the most commonly used varieties that do double duty as table and wine grapes.

After assuming a post at the University of Yamanashi, I had many occasions to try local white wines. However, they were thin, lacked bouquet, and had a very pronounced oxidative character and an alcohol character that came across very strongly. Local red wines had a choking bouquet without any fruitiness and struck me as thinbodied. I thought I would not want to spend my entire life working on such plain-tasting wines and was worried that I should be looking for another line of work instead. It was not until much later, after I encountered California wine, that I learned the true wonders of wine. Looking back, I recognized that it is the norm among Japanese wines not to possess rich varietal aromas or flavor, but I only understood this after coming to California. If I may add, the quality of Japanese wines today has improved vastly from what it was before.

#### Memorable Encounters in Davis

On December 1, 1980, our family—my wife, my two young daughters, and myself—arrived at Sacramento Airport. We were there so that I could study under Professor Singleton, someone I had known only from scientific literature prior to that day. The professor and his wife were at the airport to meet us, and I remember feeling a real sense of comfort on seeing them. It was hard to believe that I had never seen him before in my life.

I had very simple reasons for choosing to study at the University of California, Davis (UC Davis) over France or other European countries. Between 1954 and 1956, with World War II still a recent memory, my father, Isami Yokotsuka, had learned the sensory evaluation of wine from Professor Maynard A. Amerine. My father was a professor of enology at the University of Yamanashi and he often told me about the greatness of the Department of Viticulture and Enology at UC Davis. He was probably the first Japanese member of the ASEV and the first Japanese researcher to have his work published in the American Journal of Enology and Viticulture (AJEV). I was also immensely interested in how California wine had caught up with European wine in such a short time and wanted to learn the famous spirit of practical learning in American academia. I had long wanted to study at UC Davis and bring all these new experiences and ideas back to Japan, to ignite the growth of Japanese wine.

At UC Davis, I audited Dr. Singleton's introductory enology course for undergraduates and phenolics class for the graduate division. In the undergraduate course, Dr. Singleton used the textbook *Wine: An Introduction*, a book he coauthored with Dr. Amerine. The class included several humanities majors, and I was surprised that in the United States even students from the humanities departments could study enology as an elective. Because of this experience, the introductory enology course at the University of Yamanashi is now open to all undergraduates, with approximately 400 students enrolling in the class each year.

However, what surprised me even more was seeing the real-life industry-academia collaboration in California. I was impressed by the partnership between the University of California and the wine industry. Professor Singleton and Professor Roger Boulton would occasionally invite me, saying "I'm visiting so-and-so winery this Sunday. Do you want to join me?" We would leave the university early in the morning, arrive in San Francisco Bay Area around noon, have lunch at a local restaurant with neighboring wine growers, then head for our destination. Waiting at the winery would be local grapegrowers and winemakers, and these two UC professors would essentially hold a very basic class on grapes and wine for them, conduct intense discussions, and repeatedly and exhaustively debate issues from a practical standpoint. Sometimes there were 10 people; at other times, there were 20. Two academicians of international repute, speaking with a handful of industry professionals on such a basic subject—it would be unthinkable in Japan. I was amazed and at the same time moved by seeing up close an example of American partnership between town and gown. In another important revelation, I saw that grape and wine were truly inseparable, with the norm being each winery supplying its own grapes, in a stark contrast to Japan, where grape and wine are considered two separate areas. Of course, our own Institute has had its own vineyard since 1976, where approximately

60 European varieties thought to suit Japanese climate and soil were being test-cultivated, and we were well aware of how things should be. However, while the wine industry in Japan knew in theory that grape and wine were inseparable, there were only a handful of wine producers who made wine from only grapes that they actually grew and harvested. Even now, the total volume of true Japanese wine made from Japan-grown grapes and produced in Japan accounts for only a small percentage of the total volume of wine consumed in Japan.

### The Decision to Establish ASEV Japan

I wanted to see as many wineries as possible during my stay in Davis. I used my days off to visit almost every winery in Napa, Sonoma, and the Bay Area. I was thoroughly captivated by California wine. I loved California wine for how clearly it conveyed the vintner's assertions. I agonized over how we could make wine like this in Japan after I returned home.

At that time, there were very few researchers publishing enology papers in Japanese academic societies. It was not as though there was no enology research going on. Enology papers were in fact being presented in several wine-related societies that the researchers belonged to, but at a rate of two or three in societies of several thousand members each. Not only that, most of those researchers tended to prefer basic research targeting such areas as wine yeast physiology and taxonomy over work aimed toward improving the quality of wine. With so few enology papers being presented, there was little opportunity for enology researchers to come together. There was also another serious issue. Although it goes without saying that there can be no wine without grape, there was no venue for presenting specifically on winegrapes, let alone an opportunity for viticulturists and enologists to present their research in the same venue.

Near the end of my stay at Davis, I found myself in the kitchen of our home in North Davis, sharing with my wife the idea of setting up the Japan Chapter of the ASEV. And that was not the only thing that I had decided to do. I had also decided that I wanted to truly establish enology in Japan. On my return to Japan, instead of basic research on one particular theme, I would opt for research on several themes. The themes would be chosen from an educational perspective and students would be given the themes on which to conduct broadranging research. In my own way, I hoped to nurture fine scientists and artisans of grape and wine, and at the same time improve the quality of Japanese grape and wine. Japan had almost no data even for research items that were considered par for the course in the West. I wanted to study various changes in the quality of wine at each production stage—crushing, pressing, fermentation, treatment, and aging—using grapes harvested in Japan, and finally present and discuss the data in a society devoted to grape and wine. A tall order, considering that there was not even an occasion in Japan where grape

2010 ASEV Merit Award

and wine researchers or professionals could present their work. My wife, who did her undergraduate studies at the same university as I, promptly understood my intent and supported the idea. I went to Dr. Singleton immediately, and that was the beginning of ASEV Japan.

#### The Launch of ASEV Japan

We left Davis for Japan soon after, and between October 1981 and March 1984 there were intermittent preparatory talks with the ASEV through Dr. Singleton for the establishment of ASEV Japan. In April 1984, I became a full professor, and that June, I was able to establish and chair the ASEV Japan Establishment Preparatory Committee at the Institute of Enology and Viticulture, University of Yamanashi. With 21 people officially endorsing the establishment of ASEV Japan, we drafted a request to the ASEV and on July 13, 1984, I left for Davis with the request documents in hand. I would stay there for approximately two months, until August 29. In fact, on arriving at Davis, I announced to Dr. Singleton that I was committed to staying in Davis until the ASEV approved the launch of the Japan Chapter. In the weeks that followed, Dr. Singleton, Mr. Peter L. Christensen, and myself worked to create the rough draft of ASEV Japan bylaws, and on August 24, I received summons to the ASEV Board of Directors meeting at the ASEV office near the Davis train station. Dr. Singleton was on hand while I was asked several questions, such as why we wanted to establish ASEV Japan and what was the current state of Japanese grapes and wine. What exactly I answered, I honestly do not remember. I had met with Dr. Singleton for a thorough review the day before, so whenever I was pressed for words, he would step in to answer for me. I had literally worried myself sick, completely losing my appetite and compromising my health. However, wonderfully enough, the moment the ASEV approval came, the symptoms disappeared and my appetite came roaring back.

I think we should not forget that ASEV Japan exists today solely due to the understanding and the generosity of ASEV officials who allowed its establishment despite the lack of assurances about its future. There is a popular TV show in Japan called "Tsuribaka Nisshi," or "The Diary of a Fishing Freak," which is about the friendship between a construction firm employee and his boss through their shared love of fishing. In one memorable scene, the protagonist, a man who is great at fishing but a complete failure at his job, proposes to the woman who will be his wife, "I can't say whether this will make you happy, but I know for sure that it will make me happy—so will you please marry me?" I think this is exactly what I asked of the ASEV back then. "We can't say whether this will be good for you, but we know for sure that this will contribute to the growth of both the industry and the academia of grape and wine in Japanso will you let us have our chapter?" And the answer was yes. In that answer from the ASEV, I recognized that the broad-mindedness of the American people is the character that has made your country a leading presence in the world.

November 23, 1984, we held a general meeting in Tokyo to formally establish the Japan Chapter. For several years following the launch, other existing academic societies and organizations associated with wine remained quite wary of us but gradually became cooperative as they ascertained that the Chapter was purely an academic organization.

Currently, the annual total alcohol consumption in Japan is approximately 2.4 billion gallons. Only 3% of this is wine. The consumption volume of true Japanese wine made from Japan-grown grapes and produced in Japan is a minuscule 66 million gallons. Considering that production scale, ASEV Japan has a large membership—approximately 350 Chapter individual members, including approximately 100 parent society individual members, and as many as 50 Chapter industrial affiliates—demonstrating its strong appeal to wine professionals.

#### Three Important Missions of ASEV Japan

ASEV Japan has three important missions: the first is the holding of the annual meeting, the second is the publication of the Journal of ASEV Japan, and the third is the invitation of a representative from the parent society.

The annual meeting is held once a year, usually in November, as the period between April and October is taken up by grapegrowing and wine production. However, when the meeting is held up north in colder areas, it takes place in summer. There have been on average 17 oral presentations of papers per meeting over the last 20 years. Prior to the launch of our Chapter, the total number of presentations on winegrape and wine in all of Japanese academia was something like two or three, so research in those areas has certainly seen some uptick. At the annual meeting, the Best Presentation Award is given to an outstanding young researcher chosen by six to seven chairpersons from among young researchers (mainly students) who make an oral presentation. The choice is made on the basis of the manner and the content of the presentation as well as the abstract, and the awardee is announced at the end of the presentation day.

The second mission is the publication of the Journal of ASEV Japan. I explained to the ASEV the importance of a Japanese-language journal for professionals and researchers at wineries and vineyards, and after much discussion, we reached an agreement wherein the Chapter Journals would feature research notes and technical briefs in Japanese and Japanese members were urged to contribute full papers to the AJEV. The Journal of ASEV Japan is issued three times a year: a biannual journal of original papers and one collection of abstracts from the annual meeting. One of the most significant characteristics of the Journal of ASEV Japan is that it features a Japanese translation of the abstract of every paper published in

2010 ASEV Merit Award

the AJEV. While the Japanese members do possess good English reading ability, naturally, they are more inclined to read the English full paper after reading the Japanese abstracts. In fact, most members seem to use the Japanese abstracts to select papers they are interested in and then read the English full papers at their own pace. This service has been extremely popular with all Japanese members

The third mission is to invite a representative from the parent society to the annual meeting, to hold special presentations. I consider it the best opportunity to gain basic or even cutting-edge knowledge of grape and wine from the United States. The invitation was issued every two years until 1995, when we switched to a three-year cycle. The main reason for the change was that issuing the invitation for the general meeting when it was taking place in Kofu, the headquarters of ASEV Japan, made preparations much easier and the hospitality extended to the guest much more thorough.

The ASEV and ASEV Japan remain in close contact in operating the Japan Chapter, and I feel there are no significant problems between the two. What few issues exist between us and our American friends at the ASEV are mostly due to the language barrier and the cultural differences between the United States and Japan. That we have been able to overcome these is due to the incredible patience of the ASEV.

The first ASEV member whom we invited to the ASEV Japan annual meeting was Dr. and Mrs. Singleton, in 1986. The first ASEV representative to visit Japan was Mr. and Mrs. Louis P. Martini of Louis M. Martini Winery, in 1988. As of last year, 10 representatives and Dr. Singleton have been invited to our annual meeting. They spoke at the annual meeting(1-10), visited a number of wineries, and gave direct advice to winemakers and grapegrowers. There are many examples of quality improvement in Japanese wine brought about by the presentations by the ASEV representatives, including the elimination of pinking in Koshu wine through hyperoxidation, barrel fermentation, flavor improvement in Koshu wine and red Merlot wine through barrel storage, precooling winegrapes, skin contact, and improvement of the quality of Chardonnay wine through the combination of low-temperature fermentation or barrel fermentation and storage.

#### Conclusion

I am deeply grateful to all the ASEV presidents and board members, past and present, and those involved in the launching and operation of ASEV Japan. I am also truly indebted to all the ASEV representatives who came and spoke at our annual meetings, to Dr. Rie Ishii Rousseau for her help with banking matters as well as with our interchange with the ASEV, and to the many ASEV Japan board members and Japanese members who operated ASEV Japan with me. My wife Yoriko was always there with advice and encouragement whenever

I faced problems and difficulties in the establishment and management of ASEV Japan. Thank you. I think we both came to understand the culture of America and the American people through the ASEV Japan initiative. In possibly the greatest sign of our trust and love of the United States, our two daughters finished university and graduate school in Japan, then went on to do further graduate work at UC Berkeley and Indiana University.

Founded in August 1984, ASEV Japan turned 25 years and 10 months old this June. We are holding a general meeting on November 19 in Kofu to celebrate our 25th anniversary. To represent the ASEV, we have invited Ms. Patty Saldivar, who will become President of the Board next month.

In closing, I would like to thank you once again for this great honor, and take this opportunity to wish for even greater prosperity of the ASEV in the future. Thank you for your time.

## References

- (1) Vernon L. Singleton (UC Davis). Wine aging reactions, especially oxidation of phenols. ASEV Japan Newsletter, No. 6, 1-2 (1987). Presented at the 1986 annual meeting in Tokyo.
- (2) Louis P. Martini (Louis M. Martini Winery). The history of the California wine industry and its technology. ASEV Japan Newsletter, No. 14, 2-8 (1989). Presented at the 1988 annual meeting in Kofu.
- (3) Peter L. Christensen (UC Davis). Uptake, storage and utilization of nitrogen by grapevines as influenced by time of application under furrow and drip irrigation. ASEV Japan Reports, 1 (3): 207-210 (1990). Presented at the 1990 annual meeting in Tokyo.
- (4) John W. Buechsenstein (MacDowell Valley Vineyards). Wine education through component tasting. ASEV Japan Reports, 3 (3): 214-215 (1992). Presented at the 1992 annual meeting in Kofu.
- (5) Bradley Alderson (Robert Mondavi Winery, Woodbridge). The application of total quality management techniques to a winemaking program with multiple growers and multiple vineyard sites. ASEV Japan Reports, 5 (2): 193-195 (1994). Presented at the 1994 annual meeting in Ikeda, Hokkaido.
- (6) Michael Martini (Louis M. Martini Winery). The continuity of past to vision. ASEV Japan Reports, 6 (3): 247-253 (1995). Presented at the 1995 annual meeting in Kofu.
- (7) Ralph E. Kunkee (UC Davis). Our friends: Wine yeast and malolactic bacteria. J. ASEV Japan, 9 (3): 189-190 (1998). Presented at the 1998 annual meeting in Kofu.
- (8) Christian Butzke (UC Davis). Global winemaking technology: Practices, principles, problems, and predictions. J. ASEV Japan. 12 (3): 141 (2001). Presented at the 2001 annual meeting in Kofu.
- (9) Martin Mochizuki (Mochizuki and Associates, Inc.). Recent advances in viticulture practices to improve wine grape quality. J. ASEV Japan, 15 (3): 141 (2004). Presented at the 2004 annual meeting in Katsunuma, Yamanashi.
- (10) Linda Bisson (UC Davis): The role of *Brettanomyces* in wine production. J. ASEV Japan. 18 (3): 190-197 (2007). Presented at the 2007 annual meeting in Kofu.

2010 ASEV Merit Award