

There was no turkey for the Milletts this Thanksgiving. No stuffing, potatoes, cranberries, pumpkin pie or football game, either. I spent this Thanksgiving participating in the 'International Workshop on Plant-Microbe Interactions at Freezing Temperature Under Snow' which was held in Sapporo, Japan, from November 25th to the 28th. The host city of Sapporo offered many things, including an impressive cold environment research facility. The intensive four-day workshop highlighted work of the world's leading snow mold authorities, including scientists from Japan (40+), Canada (6), Norway (3), Sweden (1), Russia (2), Iceland (1), Finland (1) and, of course, the USA (2). The trip was an important event for me and the turfies of Wisconsin.

An alternative headline for this article could be, 'Big Foolish American Godzilla Spends Thanksgiving at Snow Mold Workshop in Japan.' From getting off the plane in Tokyo, to trying to order lunch at a fish market diner, I felt huge, stupid and definitely out of place. Fortunately, the Japanese people are the nicest, most hospitable, generous and helpful people that I have ever visited. The trip started off on the wrong foot as Debbie (my wife) and I were delayed at immigration and missed our connecting flight to Sapporo. After finding the tiny airline office and practically knocking down their walls with our behemoth suitcases, we were quickly shuttled to another airport for the next flight to Sapporo. I wish that the US could adopt the kind of passionate, professional service that one encounters throughout Japan.





FIG 1. The Old Hokkaido Gov't Building, 'Aka Kenga' (red bricks), was built in 1888 and reflects the Massachusetts State House. Notice bamboo teepees for cold protection.



FIG 2. Odori Koen stretches through Sapporo and is host for the Winter 'White Illumination' and the world famous 'Sapporo Snow Festival.'

Even though we caught the next day's earliest flight, I still missed the opening ceremony of the workshop. "Nice first impression," I thought to myself as I entered the darkened conference room where Dr. Nissinen had just started his presentation. We were all assigned a leather power chair in a long oval configuration with the presenters at the front of the room. In the center of the oval was a huge flower arrangement with national flags of all the attendees. *(Continued on page 14)*

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The whole scene was very intimidating. During the coffee breaks, we could walk around, gab and take in the breathtaking view of the mountains. The 1972 Winter Olympics were held in Sapporo and the ski jump and giant slalom areas are still in use.

The lunch buffets at the workshop offered food that I had only seen on television. I took small samples of almost everything and most dishes were very tasty. Others, like octopus tentacle, just felt funny in my mouth. The Japanese have a passion for cooking and eating that surpasses Americans. Food is a very important part of the modern culture. I first realized this passion when watching TV in the hotel room. There are regular cooking shows, cooking game shows, celebrity and bloopers cooking shows. Even the department stores have an incredible amount and diversity of food. Debbie bought two blemish-free tangerines wrapped in their own styrofoam container for \$4 a piece. Man, those were the best tangerines! Food is big in Japan, with the focus on selection, preparation and presentation.

Sapporo is also big in Japan. Sapporo, with 1.77 million people, is Japan's fifth largest city. Sapporo is located in the Hokkaido prefecture (county) of Ishikari. This is significant to Typhula researchers because this is where T. ishikariensis ('Ishikari-origin') derives its name. Japanese cite Hokkaido's capital as one of the most desired places to visit in Japan (Figure 1). Although it is large, it is not confusing or congested. American William S. Clark was sent by President Ulysses Grant in 1870 to help build Sapporo at the request of Hokkaido's govenor. Clark's influence of an ordinary grid for a city street plan is a rarity in Japan. One beautifully landscaped park is the central Odori Koen (Figure 2) which is where the winter "White Illumination" (Christmas light display) and the world famous Sapporo Snow Festival take place. They were sodding Kentucky bluegrass in trampled areas and a buried plastic mesh was used to reduce foot traffic damage. The long workday didn't leave much time for tourism but Debbie got me out at night. Sapporo is a beautiful place.

The first day of the workshop started with Nissinen's 20+ years of Finnish work on *Sclerotinia borealis* and *Typhula spp.*, Gaudet's fructans work and Nakayama and Tsurumi's cold and snow mold resistance in wheat. Some very fine work was presented but I didn't know anyone there. I had only read their research papers or e-mailed them. Just meeting world-leading snow mold authorities such as Now Matsumoto, A.M. Tronsmo and Izumi Saito was probably the biggest highlight of the first day.

The second day highlight for me was presenting my work. It went very well and I stirred up lots of questions, which is always a good sign. Team Canada presented more impressive work including Dr. Hsaing's (Guelf) work with T. phacorrhiza as a biocontrol agent. Dr. Now Matsumoto (Japan) also wowed the audience with his presentation and further fueled the debate over Typhula taxonomy. The day ended with a tour of the Hokkaido National Agricultural Experiment Station and its Cryotron facility. The Cryotron was completed in 1996 and provides several controlled environments with temperatures ranging from -80 to 30 C. They had a fancy version of the Wisconsin soil temperature tank, a hardening room, an ultra-low temperature room, a rhizotron facility, a vernalization room, an entomology lab, a soil analysis room, a microwave dark room and an electron spin resonance room. My favorite was the snow maker room. Wow, was I envious. Can you imagine having the ability to make snow anytime of the year? This Cryotron facility will certainly further propel the Japanese snow mold research. It is an unbelievable accomplishment.

A reception with Hokkaido and international dignitaries followed our rainy tour. The gracious hosts served beautiful appetizers, Sapporo beer and saki. Unfortunately, they forgot a bottle opener for the Sapporo bottles so I donated my Wisconsin can opener. They were very appreciative. Drinking is an integral and important part of interpersonal relations in Japan, just as it is in Wisconsin. However, I read that the Japanese drink enthusiastically at certain times and I figured out this was one of them. It seemed that just as soon as I took one sip from my glass there was another Japanese host filling it back up. Japan's traditional drinking toast of 'Kampai!' means something like 'bottoms up!' I heard this very often and soon switched to fruit juice. The scene reminded me of my fraternity party days. Amongst the researchers and dignitaries you could see that some Japanese had beet-red faces. The beet-red faces were those who lacked alcohol-dehydrogenase and are unable to tolerate intoxicating levels of alcohol. However, the Japanese probably imbibed the most with the exception of the clover breeder from New Zealand. The reception was a unique experience.

The third day was Thanksgiving and I greeted the only other American, Dr. Murray from Washington State, and wished him a Happy Thanksgiving. When I wasn't dream-

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Frank Baden Territory Manager Bettendorf, IA (319) 332-9288 ing about eating turkey with my family back home, I learned about the biochemistry and molecular biology of snow molds. Highlights included carbohydrate metabolism at freezing temperatures, the hardening process, Arabidopsis as a freezing research tool, antifreeze proteins and the evolution of T. ishikariensis into colder environments. A traditional style Japanese banquet ended the day with food and drinking. We were treated to the sound of ancient Japanese folk music while a plethora of exotic dishes were passed around. I got tired of asking what the dishes were and just sampled everything from the dried squid to raw eel to salty fish eggs. Dr. Okuyama told me that my chopstick technique is perfect and that he doesn't see many of the Japanese youth use them anymore. This day will always be remembered as the day we were introduced to squid and eel for Thanksgiving.

Friday we saw the first snow of the season for Hokkaido, but it didn't last long. Canadian and Japanese wheat scientists presented their progress on breeding for snow mold resistance. Current advancements in field and growth chamber protocols will no doubt greatly speed up snow mold resistance breeding efforts. The closing ceremony seemed to drag on and everyone looked a little tired. But still, there seemed so much more to talk about and people seemed a bit hesitant to go, not ready to fly off to their corner of the world. We posed for a group picture and congratulated each other for a very successful and educational week.

The workshop was a significant event for me, both professionally and personally. Professionally, I have made snow mold friends around the world and spread the work of the UW and the contributions of the Wisconsin Turfgrass Association to a global audience. Personally, I learned I can survive and enjoy navigating through another country without knowing the language or customs. It's a very humbling and gratifying experience. Although I ate an unusual Thanksgiving meal, I still took time out to express thanks for my blessings. There are many things that I am thankful for, including being a Wisconsinite and an American. And I am grateful to the WTA and the Department of Plant Pathology for supporting this effort to help build a snow mold bridge to the rest of the world. I am also thankful for the love and support of my wife, family and friends. It is good to be home.



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