# Agrichemical and Environmental News

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## The Wide World of Lingonberries Stalking the Elusive Berry in Europe

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In 1999, I traveled the eastern United States and Canada to observe and assess North American lingonberry production. This two-week journey ("Stalking the Wild [and Not-So-Wild] Lingonberry," *AENews* Issue No. 165, January 2000) took me to every nursery and/or grower of lingonberries in Wisconsin, Michigan, Maine, Nova Scotia, and Newfoundland. I learned that there were only three North American nurseries and six growers producing lingonberries outside of Oregon and Washington. Having seen photographs of vast lingonberry patches, I was searching for one. But giant lingonberry fields proved elusive; the biggest field I found in two weeks of searching was less than one acre, and wild production was sparse as well.

As lingonberries are also grown in Europe, the next phase of this research necessitated looking at the world production of lingonberries. This would of course involve field work. Someone had to travel to Europe and take a look at production and research there. I volunteered to perform this grave task.

#### But...What Is a Lingonberry?

The lingonberry is a small, red fruit grown on bushes less than a foot tall. It is also known as cowberry, partridge berry, mountain cranberry, rock cranberry, dry-ground cranberry, lingen, lingberry, fox berry, and red berry. The name "lingonberry" originated in Sweden.



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Wild lingonberries are found across the Northern Hemisphere in Alaska, Saskatchewan, Nova Scotia, Newfoundland, Labrador, and the Scandinavian countries. The wild plant is quite short, three to six inches tall, and produces fruit on a single bloom. Domestic lingonberries, many of which originated in Europe, are plants that have been cross-bred to grow to eight to twelve inches tall. They have two blooms and produce more fruit than the wild variety.

Lingonberries are used in jams, jellies, preserves, concentrates, and liquors; the berries are also sold fresh. In the mid-1990s, the lingonberry made commercial inroads in nurseries in Oregon, Wisconsin, and Michigan, primarily as an "edible ornamental" plant.



#### The Adventure Begins

On August 2, 2001, my wife Kate and I took off for Germany and Scandinavia for twentyeight days of incredible adventure and information gathering. Our first stop was Hanover, Germany, to look at the only known mechanized lingonberry picker. Unfortunately, we arrived on a Friday, and no one was available at the university to help us during the weekend.

Monday we were off to Malmo, Sweden, where we met up with a consultant named Pat Carroll who drove us around half of Sweden looking at grower fields and visiting processors. We toured an eco ag center that was trying to grow lingonberries. We stopped at the world lingonberry germ repository in Balsgard and discovered that the program had been discontinued. This means those of us in the lingonberry industry must find and save as much of this plant material as possible.

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We found that many of the growers who were trying to grow lingonberries along with other crops did not have small fruit experience. Their lingonberries were not the top priority, therefore production often suffered. A successful pair of growers named Bo and Solveig Nilsson of Moheda were very excited to find out that the lingonberry trade is alive and well in the United States. They have been growing lingonberries for about four years and have developed a very nice line of lingonberry and raspberry jams and jellies.

We stopped in every major town on our trans-Sweden journey, looking for lingonberry products in the grocery stores. We found jams, jellies, and concentrates; in northern Sweden, we even found a lingonberry winemaker. (Interested? He has 40,000 liters to sell!)

#### From Sweden to Finland

Next we were off to Helsinki, Finland, where we met up with Meeri Saario, the only active lingonberry researcher in Finland. She showed us around her test plots and explained her research, including results from using different mulching materials. She has also uncovered new indications that lingonberries may have some weed-suppressing properties.

We were originally going to get a car and drive around Helsinki, but Meeri surprised us by offering to show us around. Her expertise and local perspective made our visit even more productive. We were able to take several walks in the Finnish forests, where we saw abundant wild populations of lingonberries and bilberries (European blueberries). In Helsinki, we visited a great farmers market, but it was a bit too early for fresh wild lingonberries.

Throughout our travels, we observed fields of grain, corn, and potatoes. European and Scandinavian farmers appear to grow about the same range of crops that is grown in the Willamette Valley. If you ignored the red tile roofs and the different languages, you would think you were in western Oregon. The climate, weather, mountains, lakes, crops, and gardens were all similar to those at home, as were the noxious weeds. In fact, hogweed, the newest noxious weed in Oregon, is growing wild all over Europe and Scandinavia!

#### On to Estonia

From Finland, we hydrofoiled to Estonia, where we rode a bus from the capital, Tallinn, down to the southern Estonian city of Tartu. There we met Taimi Paal and Dr. Kass, who have been conducting lingonberry research for ten years. Their test plots comprise about two acres or one hectare, on which they test different berry varieties and production methods.

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We then drove to the southernmost part of Estonia to look at the wild berries, an area that just happened to be next to the Latvian and Russian border. We were instructed to bring our passports, "just in case." We asked what that meant and were told that the Russians still come across the border unannounced. (That made us feel real safe.) But in the interest of science and the greater goal of cooperative extension, we trudged out into the middle of a yellow pine forest, thirty kilometers from the nearest small town, and looked at wild lingonberry stands.

After we picked about ten liters of the wild berries, our driver said he knew the Russian border guards and would drive us right up near the border. He turned before we actually crossed the border, but it was close enough for me.

One of the most memorable parts of the trip was a stop at Taimi Paal's farm, which had been in the family for 300 years. They still farmed with horses, tended a huge garden, and had barns made of concrete and rocks. Old mortar shells left over from the last Russian occupation lie rusting away by one of the barns.

#### Finally, Germany

From Estonia we flew to Munich, Germany. Here we spent time looking for more lingonberry products as well as hazelnut products. Germany is a huge consumer of processed lingonberries and of hazelnut butter and confections, which, of course, any good field researcher would need to sample.

On a side trip to Fussen, Germany, we took a cable car up a 12,000-foot mountain near the Austrian border. We enjoyed some sightseeing at the top, but a cooperative extension agent never rests. On the way back down the mountain, I spotted wild lingonberries growing alongside the cable car route! Our information said that no wild lingonberries were grown in Germany, so we'll have to go back and investigate this further.

The last day in Munich before heading out, we attended the city's huge farmers market. We found seven different market stands selling fresh lingonberries. In talking to the vendors, we learned that the source for most of these was the Black Forest--another place we will have to revisit in our quest for the elusive lingonberry.

#### Conclusions

The most significant thing I learned on my European lingonberry expedition is that Oregon and Washington are now the world leaders in commercial production of lingonberries. That is kind of a scary thought, since our industry is still in its infancy. But this news should be very exciting for Pacific Northwest lingonberry growers. I also

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discovered that very little research is being conducted on lingonberries elsewhere in the world, which makes our work here even more important. Research is needed to determine which varieties are best to grow, including which have the best yield. Market research is needed to discover the potential for sales and economic viability. The market is strong in Europe, especially in Germany and the Scandinavian countries, which have a tradition of using lingonberry products.

The next international lingonberry conference will be held March 7, 2002, at the North Willamette Research and Extension Center in Aurora, Oregon. (For updated information, go to Internet URL <a href="http://www.orst.edu/dept/infonet/">http://www.orst.edu/dept/infonet/</a>, then click on "News," then "Upcoming Events." Scroll to March.) North American growers are excited about the potential of this small, red fruit. We hope to pursue appropriate research and launch vehicles such as a Web site and newsletter so that emerging lingonberry information can be shared worldwide.

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See Ross Penhallegon's previous AENews article: "Stalking the Wild (and Not-So-Wild) Lingonberry" on the Internet at http://aenews.wsu.edu/Jan00AENews/Jan00AENews.htm#anchor5301120

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