Turkish Cherries or a Rose by Any Other Name…

Lynn E. Long
OSU Extension Horticulturist

Photo by Alara

European consumers looking to buy cherries have the opportunity to choose many different varieties produced throughout the world. In the past, Germany, Italy, Spain and France have dominated the European market. However, in the last decade cherries from Turkey have captured an increasingly large market share ranging from 25,000 to 35,000 tons annually. The vast majority of this fruit was a single variety called '0900 Ziraat', sometimes sold in Europe under the name 'Napoleon'.

American cherry growers and industry professionals who sampled '0900 Ziraat' on their travels to Europe brought back favorable reports on the quality of the fruit. In order to determine if this cherry had the quality characteristics needed for production by American cherry growers George Ing and personnel from Oregon Cherry Growers separately imported '0900 Ziraat' bud wood from Turkey.

The bud wood imported by both parties was sent to the IRSP5 program in Prosser, Washington to be virus indexed. After indexing, both sources were provisionally released by Bill Howell, Director of the IRSP5 program. By 2002 the first trees of '0900 Ziraat' on Gisela 5 rootstock were ready for planting in the Oregon State University variety trial plot in The Dalles. In 2004 '0900 Ziraat' trees on Gisela 6 rootstock were planted in a second test plot in The Dalles.

At about this same time George Ing received a trade mark for the name 'Zing' and plants of '0900 Ziraat' began to be sold under that name. Several Oregon growers were interested in growing this variety but it was unclear which US varieties would adequately pollinize '0900 Ziraat'. For this reason, samples of '0900 Ziraat' were sent from Oregon to Dr. Amy Iezzoni at Michigan State University for S-allele genotyping. Subsequent to its provisional release the Ing selection was found to contain little cherry virus and all plants propagated from this source only, were ordered destroyed.

Iezzoni's report indicates that '0900 Ziraat' has the very rare S-allele combination of $S_3 S_{12}$. This allele combination is found in only two cherries out of over 200 sweet cherries examined. These cherries are 'Schneiders' and 'Princess'. According to Dr. Iezzoni, several years ago Dr. Berthold Heinze, a forest sweet cherry geneticist from the Research Centre for Forests in Vienna, Austria told her that '0900 Ziraat' is really the old German sweet cherry variety 'Schneiders'. These results strengthen the theory that '0900 Ziraat' and 'Schneiders' are synonyms for the same cherry. In addition, 'Ferrovia' the most important variety grown in the Apulia cherry production region near Bari, Italy, is also thought to be 'Schneiders'.

Preliminary evaluation at the OSU variety trials suggest that there are definite similarities between '0900 Ziraat' and 'Schneiders'. In 2005 and 2006, '0900 Ziraat' on Gisela 5 bloomed 3 days ahead of 'Schneiders' on mazzard (Table 1), a timing that can potentially be explained by the earlier blooming habit of trees on Gisela 5. Ripening time, however, was similar as was skin and flesh color. In 2005 total soluble solids (TSS) was higher in 0900 Ziraat, but fruit was deemed somewhat over ripe when it was tested. In 2006, TSS was similar between the two varieties grown on mazzard rootstock, but lower on the '0900 Ziraat' grown on Gisela 5. Fruit size for both varieties in both years was similar except for '0900 Ziraat' grown on mazzard, which is infected with little cherry virus. Fruit firmness in 2005 was similar as was the fruit firmness in 2006 for both varieties grown on mazzard rootstock.

It must be emphasized that these are preliminary results only. However at this time, whether we call it '0900 Ziraat', 'Napoleon' or 'Zing' there is increasing evidence that this popular cherry from Turkey may in reality only be the old German variety called 'Schneiders'.

Table 1. Comparison between fruit attributes of '0900 Ziraat' and 'Schneiders' on Gisela 5, Gisela 6 and Mazzard over two years.

Variety/ Rootstock/ year	**1st bloom (+ or – Schneiders)**	**Harvest date (+ or – Schneiders)**	**Total soluble solids %**	**CTIFL skin/flesh color**	**Fruit diameter (mm)**	**Firm-ness (g/mm)**
0900 Ziraat Gi 5-2005*	- 3 days	+2 days	20.1	6/5	26.4-30.5	210-239
Schneiders Maz - 2005	-	-	18.4	6/5	29.9	249
0900 Ziraat Gi 5-2006	-3 days	+1 day	15.6	6/4	28.1	228
0900 Ziraat Gi 6-2006	-	-	18.4	6/5	27.0	208
0900 Ziraat Maz-2006**	-	-	17.2	6/1	24.6	272
Schneiders Maz-2006	-	-	17.4	6/4	30.7	272

* judged to be over ripe
** infected with little cherry virus