

Apple, Pear and Peach Cultivars Grown in Italy

FRANCO SCARAMUZZI*

The fruit industry of Italy is well developed because the climate which characterizes the Italian peninsula favors the production of numerous fruit species, from the sub-tropical ones to those most typical of the continental regions of Central Europe. Apples, pears and peaches represent three of the most important fruits of Italy.

Apple

Italian apple production at the present time reaches about 1,250,000 tons, comes from all parts of the peninsula, and consists of more than 70 different cultivars. However, more than 65 percent of this production is represented by a rather limited number of cultivars: Delicious group, 27.5%; Imperatore group, 18.7%; Abbondanza, 18.9%; and Golden Delicious, 10.5%. Among the other cultivars, the following deserve mentioning: Annurca, Renetta del Canada, Renetta di Champagne, Jonathan, Stayman group, Rosa di Caldaro, Limoncella, Democrat, Gravenstein, Sargente, Commercio, Winter Winesap, Rambour Frank, Lavina, Permain Dorata, and Rosa Mantovana.

About 80% of the Delicious and Imperatore come from only two regions, Emilia and Veneto. More than 90% of the Abbondanza and about 65% of the Golden Delicious also come from these same regions. Seventy-five percent of the Annurca come from Campania; 50% of the Renetta del Canada and Jonathan, as well as 93% of the Renetta di Champagne are grown in Trentino Alto Adige.

About 54% of the current apple production consists of winter cultivars—Imperatore group, Abbondanza,

mercio, Democrat, Rambour Frank, Lavina, etc. The autumn-winter cultivars—Delicious, Golden Delicious, Renetta del Canada, Jonathan, Rosa di Caldaro, Rosa Mantovana, etc., represent about 45% of the production. Summer apples, mainly Gravenstein and Permain Dorata, are of minor importance. In the last few years, there has developed a trend toward reducing the cultivation of winter apples, and increasing that of autumn cultivars, proportionally.

Pears

Italian pear production now exceeds 500,000 tons. This production, like that of apple, is made up of many cultivars—more than 80. In this case also, 65% comes from only six cultivars: William, 22%; Passacrassana, 18%; Coscia, 9%; Kaiser, 8%; Abate Fetel, 5%; and Spadona estiva, 5%. Other cultivars worthy of mention are: Dr. Guyote, Curato, Spadoncina, Spina-Carpi, Madernassa, Butirra Clairgeau, S. Maria, Buona Luisa d'Avranche, Butirra Precoce Morettini, Buttira Giffard, Favorita di Clapp, Gentile, Cedrata Romana, Decna d'Inverno, Decana del Comizio, and Trionfo di Vienne. The harvest of these cultivars extends over all 12 months of the year.

The very early cultivars, which ripen before Coscia, represent only 5% of the production. The summer varieties, which ripen between Coscia and William, contribute 48% of the production. Autumn cultivars, after William until Butirra Clairgeau, produce 20%. And the winter varieties which come after Butirra Clairgeau represent 27% of the national production.

*Professor, Istituto di Coltivazioni Arbores, Della Universita Degli Studi, Pisa, Italy.

In recent years, the early and very early cultivars have been increasing. Unfortunately these cultivars tend to become over-ripe too quickly, which greatly limits their commercial possibilities. Breeders have had difficulties in eliminating this undesirable genetic trait, and it even persists in the most recent Italian crosses.

Summer cultivars of average ripening continue to be the favourites of horticulturists and consumers. The cultivars most widely grown in the northern regions are William, Dr. Guyot and Butirra Precoce Morettini; while in the south, Coscia, Spadona estiva and Spadoncina are the most popular.

Among the autumn cultivars, Kaiser and Abate Fetel have increased much in popularity in recent years. And the winter cultivar, Passacrassana, has become especially prominent.

Peach

Current peach production in Italy is about 750,000 tons, and consists of even more cultivars than the apple or pear. More than 200 cultivars are being grown, of which the following are most important: J. H. Hale, 12%; Dixired, 6%; Amsden, 5%; Redhaven, 5%; S. Anna Balducci, 5%.

In the past 20 years, the yellow-fleshed cultivars have increased rapidly, and have gone from 31% to 51% of the total production. There is also evidence in the new plantings of a trend toward the earlier cultivars.

Some of early cultivars that have recently aroused special interest are Collins, Early Gold, Harm Gold, and Professor Morettini's new introductions, Favorita 1 and Favorita 2. The cultivars suitable for syrup production, mainly Vesuvio and Terzarole, are of minor importance—6.2% of the national crop.

Nectarines are not popular in Italy. The only cultivar for which production statistics are available is the Neapolitan Angelo Marzocchella.

*Current president of APS.

On the whole, the Italian peach industry has shown noteworthy development in the past few years, with a large increment of new plantings in regions relatively new to this fruit, particularly in southern Italy.

Italian horticulturists and growers continue to follow with great interest new fruit breeding developments, especially the new selections introduced in the United States.

Summerland Research Station Celebrates Fiftieth Anniversary

The magazine, *British Columbia Orchardist*, dedicated its July, 1966 issue to the Summerland Research Station in British Columbia, in honor of the station's 50th anniversary.

We are told that fruit research began at Summerland in 1916. The late A. J. Mann, was appointed as the Station's first Horticulturist in 1921. D. V. Fisher,* the present Head of the Pomology Section, joined the Staff in 1933.

Fruit breeding has been an important project since 1924, when R. C. Palmer made the first apple crosses. Since then, apricot and sweet cherry were added to the program by Mann, F. W. L. Keane and K. O. Lapins, who now directs the fruit breeding work. The most successful varieties resulting from this work are the Spartan apple, and the Van and Sam sweet cherries.

The objectives of the present breeding program are: high quality, late-keeping, McIntosh-type apples; split resistant, hardy, high quality sweet cherries; and hardy, early, dual purpose apricots.

The radiation work for inducing mutations produced the Lambert Compact sweet cherry, introduced in 1964. Other promising mutants are compact sports of apple, a partially fertile Golden Delicious type apple and Blenheim apricot, which require less thinning than the parent varieties.