SOME NEW FRUIT CULTIVARS

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New fruit cultivars appear on almost a daily basis in the developed areas of the world. Of these, probably less than two percent ever reach a level of commercial value. Discovery of a new cultivar does not necessarily bring any degree of success. There are many variables which affect the hopes for it of scientist, grower, or private developer.

During the period of 1920 through 1970, 3,897 cultivars of edible fruit bearing trees have been catalogued in the United States and Canada. These are the cultivars which have a known commercial value or those which have important or unusual characteristics for the plant breeder.

Since we cannot in 20 minutes, describe 50 years of new fruit introductions, we will only mention a few which have been introduced recently. There is always an outstanding reason or feature that brings about the popularity of a new fruit cultivar.

APRICOT: 'Autumn Royal'

This cultivar, which has a patent pending, has medium to large sized fruit, oval-shaped, with firm and juicy flesh. A self-fertile tree, the quality is equal to 'Royal'. 'Autumn Royal' is unique in having a September ripening period. It's commercial value for canning, drying or fresh fruit marketing has still to be determined.

PEACH: 'Desertgold'

Originated by United States Department of Agriculture in Fresno, California, this cultivar was introduced in 1969. The fruit is attractive, medium size, of good quality, semi-cling stone, and the tree is self-fertile. Its outstanding feature is adaptability to warm winter climates as found in the Coachella Valley of California and Southern Arizona. In that area the fruit matures in late April and early May.

PEACH: 'Sam Houston'

This cultivar originated at the Texas Agricultural Experiment Station, College Station, Texas and was introduced in 1965. The fruit is medium to large, red in skin color, firm yellow flesh, low in acid and has an unusually small freestone pit. 'Sam Houston' is adapted to regions of the southern U.S. where a low winter chilling period of 500 to 700 hours below 45°F will result in heavy production. The fruit matures about the third week of June.

NECTARINE: 'Independence'

A very attractive, cherry-red fruit of ovate shape, medium size and having suitability for long-distance shipment. Introduced in 1965 after being developed at the U.S.D.A. Horticultural Field Station, Fresno, California. This self-fruitful cultivar shows good market potential and is well-named, as its fruits mature about July fourth.

CHERRY: 'Jubilee'

The California Agricultural Experiment Station at Davis, California, introduced this fruit in 1964. A large red cherry of fine texture and sweet flavor, it can be harvested over a long period of time as it has excellent flavor when light red to fully ripe. A short stem cultivar, excellent for shipping, canning and fresh consumption, 'Jubilee' has a wide range of other cultivars providing cross-pollenization and we believe it will become a fine commercial cultivar.

FIG: 'Conadria'

This cultivar originated at the California Agricultural Experiment Station, Riverside, California. A large white fig of high sugar content, it strongly resembles Adriatic, one of its parents and is resistant to fruit spoilage. Conadria is now widely planted in the San Joaquin Valley for production of dried figs.

ALMOND: 'Kapariel'

Originated at the California Agricultural Experiment Station, Davis, California and introduced in 1962. A paper-shell type, with small kernels averaging 30 or more per ounce, it produces almonds of fine quality and in good quantity.

The above were chosen to note the changes taking place in some kinds of fruits and nuts. Old types are being strengthened or are disappearing. The year 1974 has seen the greatest demand ever for fruit and nut trees in the private sector of society. There is a great re-birth of interest and excitement when the new homeowner picks the first fruit from his own tree. Rising labor costs have focused the attention of growers on research and development of more mechanical means of harvesting, field packaging, and processing of their product. New research and new testing will certainly come, will cost more, and those doing the research will be greatly pressed to supply the new customized fruit for the convenience minded consumer.

MODERATOR CLAY: Any questions for our panel?

RALPH PINKUS: What is the minimum temperature for growing *Protea*?

BILL TEAGUE: I might say that it is variable, but at least one cultivar will take very low temperatures. At least 20°F and probably lower than that. It is hard to be too specific because we

haven't had any frozen of that cultivar. It is *Protea xenia* — but others are quite tender, like the 'Pink Mink'. It is more tender; it will take only 24°F or so. Others will tolerate only 28°F — around in there.

MARTIN USREY: I wonder if Dr. Parvin has done any work on the waratah, *Telopea speciosissima*. It is quite closely related to the proteas.

VOICE: Dr. Parvin is not here now but I know a lot of work has been done in Hawaii with it.

VOICE: Is that 'Autumn Royal' apricot available anywhere?

VOICE: L.E. Cook Company.

STAN SPAULDING: That dwarf calamondin cultivar — was that genetic or a rootstock effect?

ALBERT CANHAM: Genetic.

VOICE: I just want to ask — are the *Proteas* salt tolerant and what is the ideal pH range for them?

BILL TEAGUE: I might say that *Proteas* have almost no salt tolerance and their optimum soil pH is about 6.5.

FRANCES SPAULDING: Mr. Toohey, what is the description of the fruit of the fig you discussed.

FRITZ TOOHEY: It has a large, white fruit, very sweet. It is amber on the inside, and a dark chartreuse color on the outside. It has two crops a year and is self-pollinated.

Wednesday Afternoon, September 4, 1974

MODERATOR TOMLINSON: This afternoon we are quite fortunate in having three gentlemen with us who are going to speak on big scale propagation. These men and their organizations propagate millions of cuttings a year. In fact, at certain times of the year they propagate millions per month. It is truly propagation, big scale, and we are fortunate to have them talk to us this afternoon. Our first speaker is a graduate of Ohio State University, then he went on to get his M.S. degree at the University of Minnesota in ornamental horticulture. He has been in charge of nursery propagation at Monrovia Nursery, Azusa, California, for over 3 years. I want to introduce at this time Mr. Bill Barr. Bill: