

Varieties of Small Fruits Adapted to Tennessee

By TROY H. JONES

Tennessee Agricultural Experiment Station
Knoxville, Tennessee

Strawberries

I will begin with the discussion of strawberries, since this fruit is the most important one in Tennessee. From a commercial standpoint Blakemore is still the outstanding variety and probably will be the leader of the field for the next few years. However, this variety is far from perfect, and stands ready for replacement in the near future. One of its biggest drawbacks, as we are all aware, is "Blakemore Yellows" (non-infectious leaf variegation). This defect is becoming more and more prevalent in our commercial plantings. Growers would be interested in a variety that does not drop off in size so quickly toward the end of the harvest. The leaf spots are certainly taking their toll on the fruits and the leaves and the petioles of the variety, Blakemore. In spite of its several weaknesses, it is the best combination freezing and shipping berry now available.

Tennessee Shipper is the firmest berry that we have planted in the state and as the name indicates, is an excellent shipper. All processors say it freezes satisfactorily, but since it does not bear the name, Blakemore, it doesn't sell as readily on the market, because Blakemore is a trade mark

varietal name. There is some feeling in certain quarters that Tennessee Shipper is not quite as high in quality as the Blakemore when eaten fresh. This is a debatable point and I doubt seriously if many people could tell the two apart. The season of these two varieties is almost identical. According to yield records, Shipper is a superior producer and it does not as yet show signs of breaking down with Yellows. The "Yellows" I am referring to is not the one which is caused by a virus and is contagious; this rather is due to a genetical breakdown. I do



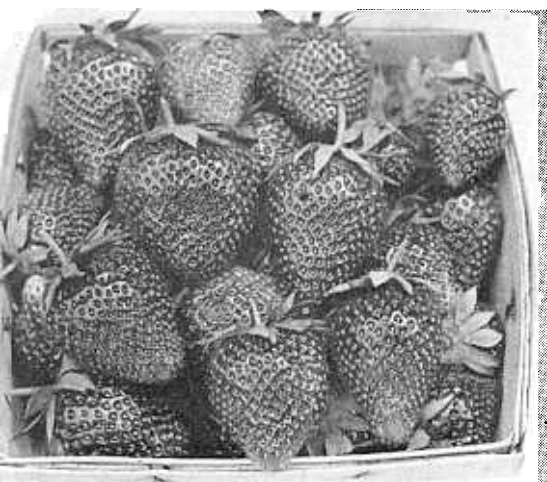
Tennessee Shipper strawberry.

not feel that Shipper is any more resistant to leaf spot or any of the fruit rots, but it holds up in size throughout the season a little better than Blakemore. Kentucky has planted this variety on a larger scale than our own Tennessee growers. This does not mean it is more adapted to our neighboring state, but rather that the Kentucky growers were a little more aware of its superiority. It is not my opinion that Tennessee Shipper will replace Blakemore, but I certainly recommend it for more trials throughout the state. It is my conviction that both of these varieties will be superseded in the near future by a more productive and higher quality berry.

Another one of Tennessee's introductions, Tennessee Beauty, is in my estimation the best of the three of our Station's introductions to date. It is really attractive, with a large green

healthy cap, and it has outyielded the other two Tennessee varieties and Blakemore on several occasions. The season of harvest extends 3 to 10 days later than either Shipper or Blakemore. It is firm enough to ship and according to our freezer people it makes a satisfactory pack. There is a tendency for this variety to develop a slightly hollow berry when the size is quite large, and for the berry to have a white tip until fully mature. I do not think the hollowness of the berry is much more serious than with any of the other large berries, and it could be that the white tip could prove a good picking criterion. In other words, the berry should not be harvested for freezing purposes until it is uniformly colored. For shipping to distant markets, it could be picked just as the tip is losing its whiteness. The one drawback to this variety is the fact that it does ripen later in the season than Blakemore. Our place in the fresh strawberry market is geared to the Blakemore season. And our agricultural set-up in West Tennessee, which is the more important strawberry section of Tennessee, is based on cotton. When cotton needs to be chopped, it is hard for strawberry growers to find pickers. So a variety that extends the fruiting season and overlaps with cotton production is likely not to succeed there. As a garden variety, I consider it most desirable because home gardeners are interested in lengthening the season. I do not think all nurserymen who are propagating strawberries could go wrong in increasing their

(Photos courtesy Tenn. Agr. Exp. Sta.)



Tennessee Beauty strawberry.

plantings of Tennessee Shipper and Tennessee Beauty. The acreage of these two is increasing each year, and I believe it will continue to do so.

The third strawberry introduced from the Experiment Station is Tennessee Supreme. I would commend this berry to the home gardener because of its high quality, good color, and good yielding ability. It was introduced as a freezing berry and certainly fills that purpose wonderfully. There is one serious drawback to this variety and that is that it is too soft for commercial handling. Chances are, it will never succeed as a processing berry, and of course, it was never intended to be shipped as a fresh market berry. I do not think it will go beyond a home garden variety.

Growers and nurserymen are already interested in the new strawberry which is being released for the first time this year from the Experiment Station. It is still under number (965), but in all probability will be given a variety name at the close of the 1950 harvest season. It is felt by those who have observed this Tennessee selection, that it has a bright future ahead. The shape of the berry is somewhat similar to Blakemore. It has a beautiful green cap, an attractive color with a lively sheen to the flesh. The inside of the berry is a little lighter than is perhaps desirable but after freezing it for several years, those who have observed the frozen berry do not discount it from the standpoint

of being light in color. It will, no doubt, compete favorably as a frozen product with Blakemore. Most people who have tasted this berry, both fresh and frozen, consider it superior in quality to Blakemore. It blooms, according to Station records, slightly later than Blakemore and ripens a little ahead of Blakemore. All growers welcome any good variety that ripens earlier in the season. An early berry puts us in a favorable position on the market. This is where No. 965 carries an advantage over Tennessee Beauty.



W. E. Roever shows Tennessee No. 965 strawberries grown at Jackson, Tenn.

The record is not complete, however, until we have some more information on how this selection will ship and handle in the commercial channels. We hope to collect sufficient information this coming harvest season. If the variety will stand handling, there is some possibility of its replacing Blakemore.

Nurserymen are always interested in the number of plants they can get from the mother plant. We are all aware of the profuse number of plants produced by the variety, Blakemore. Tennessee Shipper and Tennessee Supreme will make about as many plants per acre as the Blakemore. Tennessee Beauty is a little shy, but still makes ample plants. It appears that No. 965 will make a sufficient number of plants per acre. From a plant making standpoint, I consider all of these varieties as entirely satisfactory.

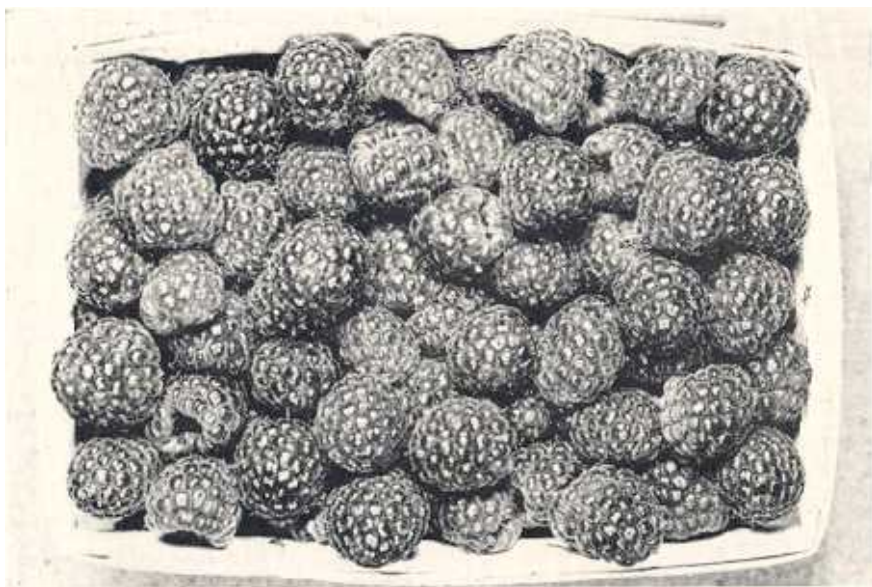
Grapes

The variety picture for grapes has not changed materially in the last 10 to 20 years in Tennessee. There is one newcomer to the list, which is Fredonia. It's a very attractive purple grape with large berries and bunches that ripen uniformly. It ripens slightly ahead of Concord. The variety, Concord, is still the backbone of the American grape industry (such as it is) in Tennessee. The greatest merit for this particular variety is its wide adaptability to soils and climate. It makes excellent juice, but ripens its berries on the cluster unevenly and there is a

tendency for the berries to shell from the bunch. These are the two black colored grapes we would recommend for the state. The best white grape is still Niagara, and our choice for the red grape crop is still Delaware. Niagara is a very good variety and will stand off competition unless the challenging variety is quite good. Delaware is the poorest of the grapes we now grow from the standpoint of vigor and production. Of course, its high quality has long been recognized but the public is a little slow to buy a grape which has such a small berry and small clusters, and a rather pinkish color. Delaware should easily be replaced within a short time by some of the newer varieties. I predict that within 10 years we will not be recommending any of the varieties that appear in our present list of grape varieties.

Raspberries

The bramble fruits are grown in Tennessee on a rather small scale. Raspberries are not particularly adapted to the state. The Boysen and Youngberry kinds have been disappointing and we depend rather largely on the wild for our supply of blackberries. So there has not been noticeable enthusiasm on the part of a large block of growers to become interested in the growing of brambles. In the red raspberry group, Latham is still the leader, even though it is a little light in color and doesn't assume attractive qualities in a frozen pack. The Experiment Station has now introduc-



A box of Tennessee Prolific red raspberries.

(See Winter, 1949 issue for fuller description.)

ed three red raspberry varieties. I heartily recommend Tennessee Autumn as the outstanding everbearing red raspberry for those in our state who are interested in the everbearing type.

This variety is head and shoulders above Indian Summer or September in Tennessee. [It is too late to grow much north of here.—Ed.] Its principal crop is produced in the spring and the fall crop is much smaller in quantity. Frequently the yield in the fall is reduced if dry weather prevails at that time. Tennessee Autumn flavor is especially potent and jam made therefrom is excellent. Tennessee Luscious never became popular because it was such a shy plant maker and fruit producer. Neither the nurseryman nor the grower ever took to

this variety, because it was not prolific. The quality was very high, as the name indicates, but it takes more than quality alone to make a good variety.

The last red raspberry introduction was named Tennessee Prolific, the name being indicative of its productivity, both in plants and in fruit. The yield is as good as Latham, and the color is improved, so I would recommend this new red raspberry to our Tennessee growers for thorough trials.

Cumberland is still a leader among the black raspberries. It has been for years, and appears to be still, unchallenged. The Morrison as grown in this state is a little shy in production, but the berries are very large and attractive. There is a black raspberry breeding program under way at the Experiment Station and it is hoped in

the near future to have a variety that is far more resistant to anthracnose than Cumberland and one that will stand up to our warm summers without dropping off in yield. Of course, the quality must be as good or better than the standard variety, Cumberland.

As I see the purple raspberry picture, there is only one variety for Tennessee; it is Sodus. This purple raspberry bears well and stands our dry summers and is not too seriously affected with anthracnose and the other leaf spots. It makes wonderful jam and I feel it should be more planted in our gardens. Our commercial freezers tell us this variety processes in an excellent manner.

Blackberries

For those individuals who would prefer to grow a cultivated, named variety of blackberry rather than depend on seedlings growing wild, I would recommend Ozark Beauty, Alfred or Eldorado. Brainerd is very productive, but is rather hard to manage. I can not see Early Harvest in the variety picture, due to its extreme susceptibility to orange rust.

Of the trailing types of blackberry (more commonly known as dewberries), I think our best kind is either Youngberry, Boysenberry or Lavacaberry. These are listed as separate varieties, but actually resemble each other very closely and have no doubt become mixed in some nurseries because as these come from nurseries,

they are practically indistinguishable.

There are a few commercial fields of the Boysen and Lavacaberry in Tennessee. The growers market locally and I understand the yield is disappointingly low. These berries are better adapted to a more southern climate or to the West Coast. Especially on the West Coast, they reach their peak of perfection and yields there are quite high.

The vines here are subject to winter injury and the blossoms frequently are damaged by frost. They are susceptible to anthracnose and the other leaf spots. No doubt we could control the disease the same as we do on other brambles, if the vines could take our cold winters and not blossom so early as to be damaged by late spring frosts. As a freezing commodity, the Boysenberry type is very desirable and it ripens at a time of year when there is a vacancy which makes it easily salable. I am sure these berries would be among some of the most popular if the yield could be jacked up. Many growers prefer the thornless sports of the Boysenberry or the Youngberry. They are easier to work with but the yield is generally sacrificed somewhat in order to have a thornless bramble.

I have not considered either blueberries, cranberries, or currants and gooseberries. These plants occur wild in our state, but there is practically no effort made to grow these plants even in the home garden, to say nothing of producing them commercially.

(Speech at Tenn. Nurserymen's Ass'n, Convention Feb. 1, 1950.)