Louisiana Bulletin No, 112, October, 1908,

AGRICULTURAL EXPERIMENT STATION

OK THK

Louisiana State University and A. & M.College, BATON ROUGE, LA.

Orchard Report of Baton Rouge Station

ORCHARD REPORT

OF

Baton Rouge Station

The experiment station test orchard was established at Baton Rouge in 1889-90. and partial reports have been issued from time to time.

Being located in close proximity to both the University and the city of Baton Rouge, there has been more or less difficulty in securing complete data, on account of depredations incident to the nearness of the city. This report will give the observations that have been gathered, and although incomplete, will be sufficiently full to be valuable to one who is interested in fruit, and who lives upon the Bluff soils of the State.

SOIL.

The Bluff soils of Louisiana are not friendly to all fruits. Being tenacious of moisture, as well as highly fertile, some varieties tend to produce excessive vegetation rather than heavy fruiting.

The fruits belonging to the more temperate regions do not possess full hardiness so far as Louisiana conditions are concerned, and becoming weakened by climatic influences, they soon become a prey to various insect and fungous attacks.

Another serious drawback is the uncertain character of the seasons. An open winter may induce very early blooming and subsequent frost will then kill the fruit. Measures adopted in Northern States for retarding the blooming period are not applicable here.

Another source of trouble is the tendency of some trees to overbear. This no doubt is the most prominent cause of the early death of some trees. The only remedy for this is to thin the fruit thoroughly and systematically, a thing that very few people, outside the commercial orchardists, ever practice.

To meet losses sustained, it is necessary to plant some fruit trees every year, so that as they bear and commence to fail, new trees will come into bearing and supply plenty of fruit.

Cultivation in the Station orchard has consisted in keeping the orchard as clean as possible and no fertilization has been given except an occasional crop of peas. Frequent use of the cultivator and plowing when necessary, has accomplished thi& fairly well. In the rainy portion of the summer it has been difficult to follow, and it is probable that some injury may have resulted by later cultivation, which seemed to be necessary.

Last year a bulletin upon the Japanese persimmons was issued, consequently they will not be treated in this report. Pecans and other nut trees, also, will be treated in a bulletin in the near future. Those interested in nut culture may find Bulletin No. 69, upon pecans, full of information. In all the illustrations in this report, the cards have inch marks, so that one may form a good judgement of the size of the fruit.

FIGS.

Figs constitute the main fruit crop of Louisiana. They are perfectly at home in nearly every section and grow and produce abundant crops without any care or attention. In the event of the extension of the canning industry fig growing may become come of great commercial importance. Being soft, not being able to stand transportation, and not being suitable for commercial drying in this climate, commercial fig growing will depend upon the cannery for development, and it will be the local cannery preserving establishments that will have to handle the crop. The growing of figs for preserving purposes has been on the increase during; the last decade. Where canneries are located the fig industry should be permanent and prosperous. Near New Orleans figs are in demand for this purpose, as a large cannery located there takes all the figs that are obtainable. The product finds a ready sale. The demand exceeds the supply, and the grower receives good prices. Preserved figs are almost unknown in the Northern market. The only figs found there are the dried ones. It only requires the introduction of the

preserved product to develop a good market for it. More trucking and more canneries to take care of the surplus stock will give an opportunity for disposing of hundreds of bushels of figs that annually are lost in Louisiana. The fig has not been well understood botanically, and there has also been great confusion in the nomenclature. Prof. Gustav Eisen, of California, made a full study of the figs and his investigations have been published. Prof. H. N. Starnes, of the Georgia Experiment Station, also has piven the subject exhaustive study, and the following classification o four Southern figs has been taken from his bulletin (Bulletin 61, Georgia Experiment Station) upon fig culture:

The condensed statement below gives the classification and at the same time will explain to many the reason why certain varieties drop their fruit.

There are four forms of flowers:

- 1. Staminate, or male flowers.
- 2. Pistillate, or female flowers.
- 3. Gall flowers, serving as a home for the small fig wasp, the Blastophaga.
- 4. Mule, or sterile flowers, found almost to the exclusion of the other kinds in our Southern figs.

These peculiarities of the fig naturally divide them into different classes.

Three classes and seven sub-classes have been formulated. As all of our Louisiana figs come under one of these heads, nothing will be said at this time concerning the other classes, except what is necessary for an understanding of the classification as they depend upon the Blastophaga or "fig-wasp" for pollination. As we do not have this insect, there is no necessity for describing them in full. The class of figs then that interests Louisianiana is the one designated as Domesticated Figs. It includes all the fias grown in the South. Southern fias produce pistillate or female flowers, and, mule or sterile flowers. While they do not produce staminate or male flowers, nevertheless, they possess the ability to develop an edible product, with no true seed. It is impossible for any of our figs to produce true viable seed, hence unless figs of another class capable of producing seed are grown in Louisiana, one may never expect a variety of figs of Louisiana origin. The different blooming habits of our figs easily separate them into three distinct divisions.

Class 1—*Mission Figs*, capable of producing both an early and a late crop.

Class 2—Adriatic Figs, capable of producing a late crop, but dropping all of its first crop.

Class 3—San Pedro Figs, capable of producing an early crop, but dropping all of its late crop.

The *sterile* or *mule flowers*, are the ones that develop into our edible fig. The *pistillate* or *female flmvers*, invariably drop off.

In the Mission class of figs the *sterile* or *mule* blooms predominate in both its *early* and *late* crops, hence, climatic conditions being favorable, two crops of figs may be obtained.

In the *Adriatic Figs* the *pistillate* or *female* blooms predominate in the *early* crop, and the *sterile* or *mule* blooms predominate in the *late* crop, hence the *early* crop drops, and the *late* crop matures.

In the San Pedro Figs, the *sterile* or *mule*, blooms predominate in the *early* crop, and the *pistillate*, or *felame* blooms predominate in the *late* crop, hence the *early* crop matures and the *late* crop drops.

Occasionally *sterile* or *mule* blooms on both the early crop of the Adriatic type of figs and the late crop of the San Pedro

It will be seen by this that the weather conditions have a great deal to do with the crop of figs. It also explains the dropping of figs to a very large extent.

Figs are universally propagated by means of cuttings, which seldom fail to grow. In rare instances, they have been ring budded, but the great readiness with which fig cuttings grow makes it unnecessary for any other method to be used.

A large number of varieties, obtained from various sources, have been grown. A number of them from California, have been growing several years, and while often times loaded with fruit, seldom produce an edible fig.

Some varieties are known under many different names, and varieties obtained from different sources, prove to be well-known varieties under new names. This confusion in time will be eliminated. The following varieties have been

grown at the Station. The names are those which came with them from different sources. Some of these names no doubt are incorrectly spelled, but are given as they were received. It must be remembered also that soils and location have everything to do with the behavior of figs, and a fig that does well or poorly at Baton Eouge may do differently under different soils and conditions in other parts of the State.

VARIETIES.

Agen — This is a medium sized, white, deep red fleshed fig. Season, August. Not particularly desirable.

Angelique (Fig. 4) — A round, white, white fleshed fig. Medium size, good flavor. Not a strong grower. Season, middle of July.

Black Dattato — Has never fruited. Evidently belongs to the San Pedro type.

Black Marsailles — A small, black, light rose fleshed fig. Very prolific. Too small for use. Season early in July.

Black California — Same as Mission.

Black Bourgassotte — A large, oblong, brown, red fleshed fig; never has borne to amount to anything. Very late.

Black Brogiotto — Never fruited; probably belongs to the San Pedro type.

Brianzola — Another variety which fails to bear. Evidently belongs to the San Pedro type.

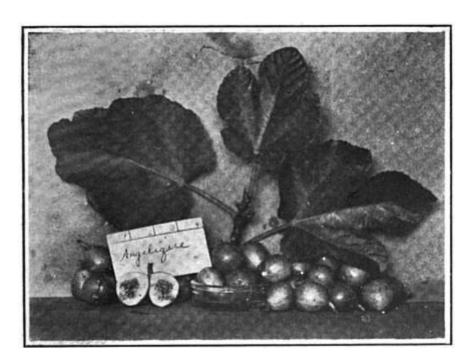


Fig. 4—Angelique Fig

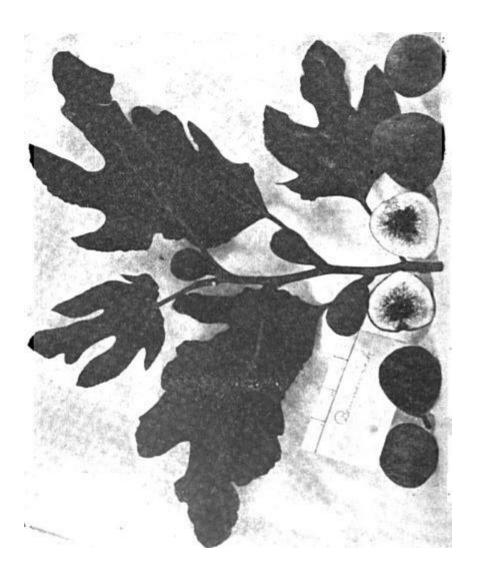


FIG 5- Brunswick

Brown Ischia—Same as Brunswick, Brown Turkey, Mandana, and Smyrna, in the collections at the Station.

Brown Turkey—This variety is not true to name, from descriptions given for it. (See Brunswick.)

Brunswick (See Fig 5)—Same as Brown Ischia, Brown Turkey, Smyrna, and Mandana, as sent to the Station from various sources. A very large, dark brown fig with light red flesh. Shape rather oblong and apt to be one-sided. Very prolific, and quite desirable, season the middle of July.

Capri—The wild fig, obtained from California, to plant with the true Smyrna. Useless except for experimental purposes.

Celeste or Celestial (Fig. 6)—The little "Blue Fig" that is grown universally in Louisiana. By far the hardiest, and all around best fig grown. Fruit is small, color a lavendar blush, very sweet, and pronounced in flavor. May be eaten without peeling when fully ripened.

De Constantine—A large, violet brown, somewhat flattened fig with deep red flesh. Quite prolific. Season, the middle of August. Not a desirable fig, as it lacks flavor. A canning variety.

Drop d'Or (Fig. 7)—A small, round, yellow fig, with rosecolored flesh. Very sweet, and melts in the mouth. Splits open badly when weather is damp. A very delicious fig, but a weak grower.

Dalmantino—This variety has not borne fruit, evidently not a Southern fig. Probably belongs to the San Pedro type.

Early Violet—A white-fleshed, brownish fig. Has not done well. Has borne but little fruit. Not at all desirable, if the trees in the orchard are true to name. Season the latter part of July.;

Guigliono—A large fig with deep red flesh. Very late and not at all reliable or desirable. . :

Honche de Bray—A round, yellow, cream-fleshed fig with; light cavity when ripe. Very delicious. Season the last of | July. Very prolific. Has a tendency to sour quickly.

Lemon—The variety grown under this name proved to be identical with the Celeste, hence is not true. The Lemon Figf as grown in certain parts of Louisiana is a very desirable flir.

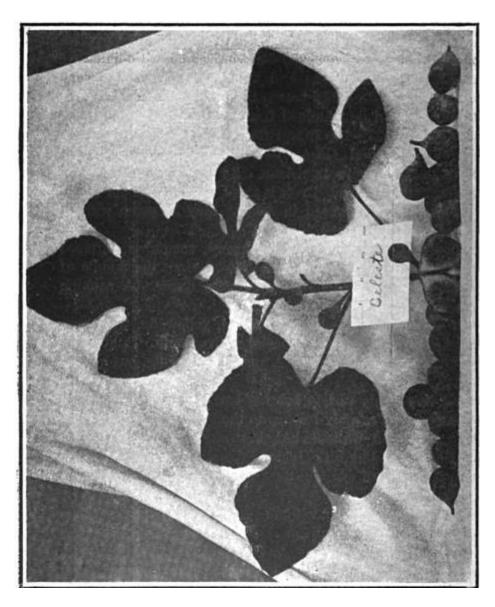


FIG 6 - Celeste

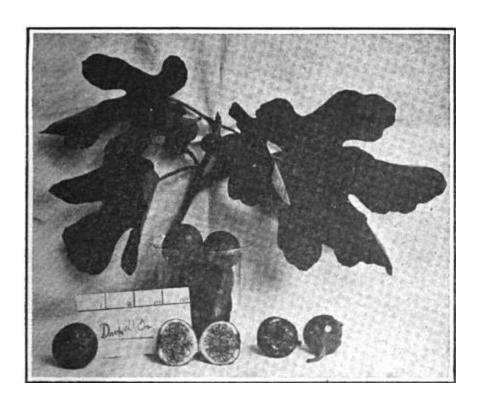


Fig. 7—Drop d'or Fig.

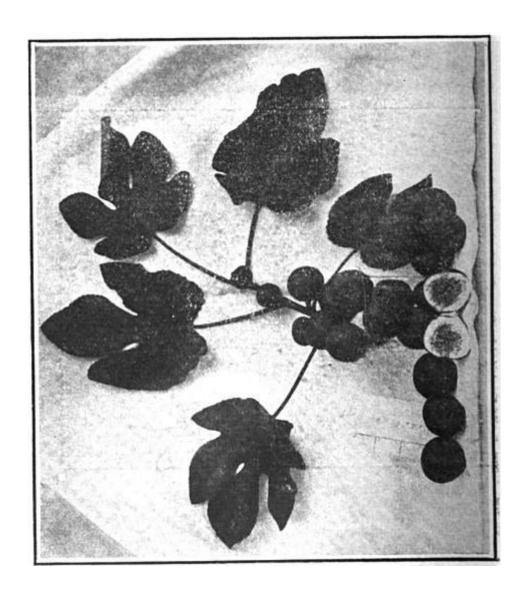


Fig. 8—Madeline Fig.

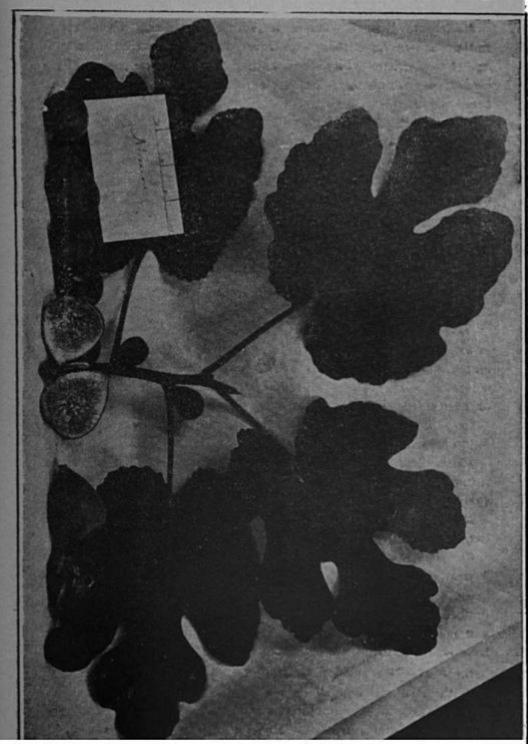


Fig. 9-Mission Fi

Madeleine (Pig. 8)—Same as White Neyri and White Marsailles, as we have them. A large white, somewhat flattened fig. Flesh cream white. Skin rather thin. Very prolific. The best of our white figs. Season early in July and ripening for three weeks.

Mission (Fig 9)—Same as Black California. A medium sized, oblong, black fig, with rose-colored flesh. Season middle of July. Quite prolific, very sweet and the best of the black figs.

Monica Bianco—A large, white, somewhat flattened fig, with deep red flesh. Very prolific and quite desirable, except that in moist weather it splits badly. Season the middle of July. Seems to do better in South Louisiana than at Baton Rouge.

New French—A medium-sized, nearly round fig, with cream-colored flesh. Very sweet and very delicious. Season middle of July. Splits very badly in wet weather, but a very desirable fig. Quite prolific.

Osborne's Prolific (Fig. 10) — Same as White Persian. This is an oblong, short-stemmed fig. Brown at the tip, shaded to amber at the base. Quite large, flesh transparent and cream- colored. Very prolific, splits badly. Season the middle of July and continues for two weeks.

Projans—A very late, white *fig.* not suited to our conditions. Seldom bears and is worthless.

Reine Blanche (Fig. 11)—This is a medium-sized, rather round fig, with pink flesh. A solid, desirable, prolific fig. Season early in July. One of the best figs in the orchard.

Rubado—A medium-sized, red-fleshed fig. Very late and extremelely uncertain. Worthless.

Sanvilo—Has not borne fruit. Evidently belongs to the San Pedro type.

San Pedro—Whether this variety is the true San Pedro is doubtful, yet it bears very early in June when it bears at all and may be true. A few medium-sized white-fleshed, white figs have been produced. Worthless.

Smyrna—The variety secured under this name is identical with the Brunswick as we have it. Not the genuine Smyrna.

True Smyrna—This variety was obtained with the true Capri for .experimental purposes. Has not produced yet. Six years old.

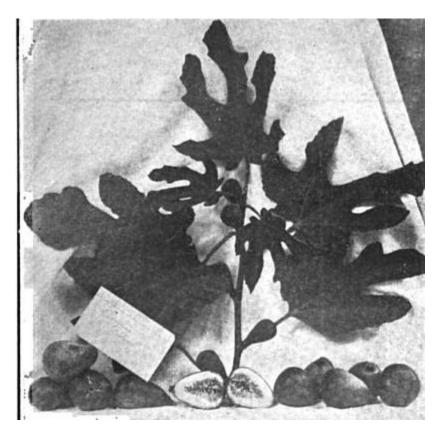


Fig. 10—Osborne's Prolific Fig.

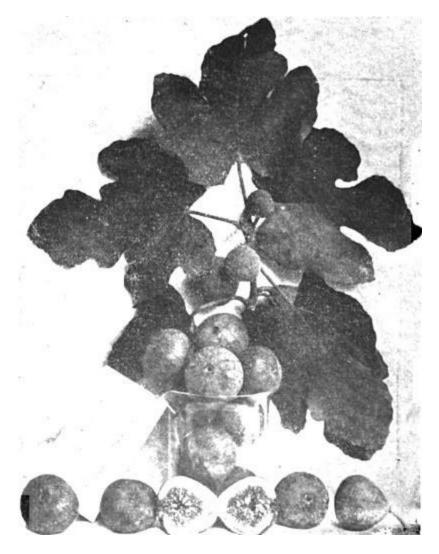


FIG 11- Reine Blanche

White Brogiotto—A very late white fig. Almost barren and worthless.

White Bourgassotte—A very large white fig. Very delicious. Belongs to the San Pedro class, as the only time it has ever borne fruit was in 1906, when a few of its first crop matured. Worthless here.

White Dattato—Has failed to fruit. Probably belongs to the San Pedro class.

White Neyri—Same as Madeleine and White Mareailles as we have them. See Madeleine.

White Ischia—A small, round, white fig with creamcolored flesh. Season the last of July. A very sweet fig, and prolific, but not as desirable as a number of others.

White Genoa—A medium-sized yellow fig with ambercolored flesh. Round in shape, fairly good bearer. Season the latter part of July. It is rather doubtful if this is the genuine White Genoa.

White Marsailles—This variety is undoubtedly not true to name, as it is identical with Madeleine as we have them.

White Persian—Same as Osborne's Prolific (which see).

Wonderful (Fig 12)—This is the largest fig in the orchard. Fruit very large, somewhat flattened, contains a cavity generally. Flesh is rose-colored. Not a heavy bearer, but a very vigorous growing tree. Season the middle of July. Not very desirable.

Zimetza—A deep red-fleshed variety. Not certain nor desirable. Seldom bears.

Of all the varieties grown in Louisiana the Celeste is the hardiest, most prolific and most popular. Its one fault is its small size. When dead ripe it may be eaten without peeling. This has been doubted, but when completely ripened, the juice and skin loses its vesicant or irritating qualities, and unless the individual is peculiarly susceptible no ill effect will follow. Some of the Gulf States report that the Brown Turkey is hardier than the Celeste, but this is not the case here. The Celeste, of all the varieties in all portions of the State, has shown the greatest amount of resistance to the cold weather. There are a number of varieties that should be grown for preserving purposes. Among these should be mentioned the Monica Bianca, Madeline, and Brunswick, while the Mission is very sweet and answers both the purposes of table and preserving fig. The largest fig in the orchard is the Wonderful, a shy bearer, with fruit three inches in diameter.

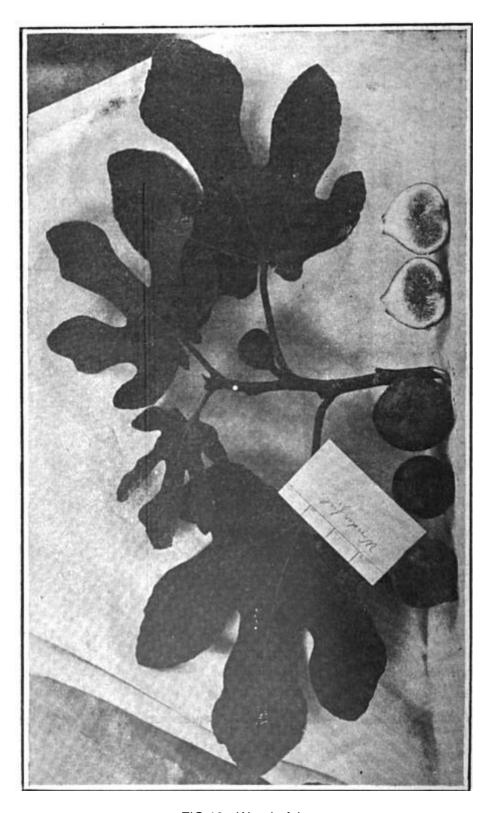


FIG 12 --Wonderful