History of the Fig

HISTORY

A. Old World

The fig is mentioned frequently in the Bible and is included in the garden of Eden. It is a traditional food in the Jewish Passover celebration. The fig tree figures in the founding of great cultures and religions. Romulus and Remus, the founders of Rome, were suckled by a she-wolf under a fig tree, which later, in the time of Pliny, was revered as a sacred tree. While sitting under a fig tree, Siddhartha Gautama had the revelation that formed the foundations of Buddhism. Figs have been prized for both medicinal and dietary value. Mithridates, the Greek king of Pontus (120-63 B.C.), heralded figs as an antidote for all ailments and instructed his physicians to consider its uses as a medicine. Pliny of Rome (62-113) said "Figs are restorative. The best food that can be eaten by those who are brought low by long sickness and are on the way to recovery. They increase the strength of young people, preserve the elderly in better health and make them look younger with fewer wrinkles". The early Greeks so highly prized figs that it was considered an honor to bestow the foliage and fruit. In the original Olympic games, winning athletes were crowned with fig wreaths and given figs to eat.

The common fig probably originated in the fertile part of southern Arabia (Solms-Laubach 1885). Ancient records indicate both King Urukagina of the Sumarian era (2900 B.C.) and the Assyrians (2000 B.c.) were familiar with it. No records of its introduction to this area exist, but the caprifig, ancestor of the edible fig, is still found there growing wild. From southern Arabia the Bahra tribe brought the fig to ancient Idumaea and Coelsyria (Lagarde 1881). Over a period of several centuries, it slowly spread from there to Syria and the Mediterranean coast. Once figs reached the coast, they rapidly spread throughout the Mediterranean region aided by the maritime nations. They were known in Crete by 1600 B.C.

While it is probable that the home of the edible fig is ancient Arabia, the origin of the cultivated fig industry is most certainly elsewhere. Almost all currently cultivated subtropicals, e.g., citrus, almonds, pistachios, walnuts, peaches, olives, dates, and prunes, were initially cultivated in unknown locations in western Asia or Asia Minor. The only known civilization of sufficient age and sophistication capable of these accomplishments is that of the Mesopotamians, who dwelt in the Tigris and Euphrates river valleys over 10,000 years ago and are credited as the original cultivators of many modem important horticultural and agronomic crops (Eisen 1901).

The Phoenicians and the Greeks, the greatest Old World colonizers, independently, and via different routes, were responsible for spreading fig culture throughout the Old World. By the end of the 14th century B.C. the older of the two, the Phoenicians, had colonized the islands of the
Mediterranean: Cyprus, Rhodes, Sicily, Malta, and Corsica. Their colonization to the south included the coasts of Africa, Spain, Portugal, and France and up to the English Channel. Evidence indicates the fig industry spread with these explorations prior to its introduction into Greece and Italy.

The recorded history of the fig industry begins with its introduction into the Mediterranean outside Asia, and particularly into Greece. Some of the earliest Greek reportings of figs are in mythological literature. According to Greek mythology, Zeus was pursuing Ge and her son, Sykeus, In the war of the Titans when, to save him, she metamorphosed into a fig tree. The ancient city of Sykea is named for this myth. Another Greek myth credits the goddess Demeter (Ceres) as introducing the "fruit of autumn" to humans. Among the Hellenes, figs were sacred to the libidinous and bibulous god, Dionysius. According to myth he placed a phallus of fig wood on the grave of Polyhymnos as a substitute for a promised favor, which he kept for himself. To this day the phallus carried at Dionysian festivals is carved of fig wood and the fig tree is the tree of phallic worshippers. The use of figs among early Greeks paralleled their rise in the literature: when mention of figs was infrequent in the literature, fresh figs were a luxury of the rich. Later, when references were common, figs had become an important dietary staple, particularly dried figs during winter months.

It is uncertain when figs were first introduced to Europe. They are hardly mentioned in the Homeric songs (ca. 850 B.C.), the oldest existing European literature. There is no reference to them in the Iliad, the description of the Trojan war waged by the Greeks. However, in the Odyssey, the description of Odysseus' wanderings after the war, figs are mentioned three times; during the agonies of Tantulus in the lower world he tried in vain to reach the fruits almost within his grasp: "...pomegranates, pears, apples, sweet figs and dark olives." As the Homeric songs were probably composed in the ninth century B.C. these references would be among the earliest. However, later investigations st the verses mentioning figs were interpolations of a later date. The st mention of undoubted authenticity is by the seventh-century B.C. Archilochus, who tells of figs being cultivated on the isle of Paros. these few references it can be deduced that figs were introduced Greece in the eighth century B.C., probably from the Semitic nations s from Palestine and Asia Minor. Thereafter, in the seventh century, B.C., Attica and Sikyon, the latter named after syke 'fig' in Greek became famous for their figs. Because they were so highly valued, the in ruler Solon, (639-559 B.C..) decreed against their export, reserving Lise solely for the Greeks. Xerxes, the king of Persia, ate Attican figs to remind him of the desirability of conquering a place that could ice such fine fruit.

Once introduced fig cultivation quickly spread throughout Greece to become an important article of diet for both rich and poor. The term "sycophant" has its origins in ancient Greece.

Athenians were particularly fond of figs and were nicknamed "sycophants" (syke or fig-eaters). Later, when members of the same population informed authorities of illegally exporting figs from Attica, the word assumed its modern meaning. From this time on the fig is mentioned frequently in Greek literature.

From Greece, fig culture spread to northern Mediterranean and Adriatic shores until it reached southern Italy. There it must have been established by the eighth century B.C. as it is mentioned in the earliest Roman mythology in conjunction with the founding of Rome, as previously mentioned.

Figs were sufficiently important to Romans that considerable effort expended developing new cultivars. These were sufficiently numerous and distinct for Pliny (23-27) to note: "We see from this how the real law which preserves the types of the species may vary." The cultivars described by Theophrastus, Cato, and Pliny can no longer be identified with certainty and probably have long since been discarded in of better ones. The many cultivars mentioned by Greek and Latin authors indicate that fig culture was extensively distributed and of great importance. Also, from these writings it appears that the best figs were those of Syria. During the reign of the emperor Tiberius (42 B.C.-37 A.D.) was considerable trade in Syrian figs.

By the end of the Roman Empire in the fifth century, fig culture was well distributed throughout the Mediterranean and along the shores of the Atlantic; it stretched from Africa, Portugal, France, Channel Islands, and the southern part of England. However, Syria was preeminent in the cultivation and drying of figs. The hieroglyphic for fig was bakou and was often referred to as a country rich in wine, oil, and bakou (Chabas 1782).

Seventeen hundred years after the Phoenician colonization, the Arabic conquests retraced their route. They carried the fig in its numerous new permutations, and raised fig culture to a degree of importance it had never attained since Syria. The Arabic invasion extended through northern Africa to Spain and Portugal and in these countries fig culture flourished rapidly and became even more important than it had been in Greece or Italy. Arabs esteemed figs above all other fruits. Zamakkhschari, an Arabian interpreter of the Koran, reported that Mohammed said, "If I could wish a fruit brought to paradise it would certainly be the fig."

These Arabic medieval invasions indelibly stamped their mark on fig culture in the occupied territories. The figs grown there were vastly superior to those of the Greek and Roman colonies. Algarve In Portugal, the most southern of the Greek colonies outside the Pillars of Hercules, was later occupied by Arabs, and with its almost ideal climate, it produced a fig that dominated Western European and English markets well into the nineteenth century. The now dominant Smyrna fig did not supplant the Portuguese figs until late in the nineteenth century. Arabic influence is still felt today in Portugal where caprifigs are referred to as fico de toca, from the Arabic name tokkar, and in Malta where the name tokar is still in use.

Figs moved east more slowly than they moved west as they thrive in arid climates and are not suited to the humid tropics of India and Asia. They became a dietary staple in Greece centuries before they were introduced to Media or Persia. This lack of knowledge of figs caused the Greeks to consider the Medes and Persians barbaric. A Greek military advisor of the time warned his king, Kroisos, not to wage war with "...barbarians who know neither wine nor figs" (Hehn 1877). However, wild varieties similar to caprifigs are still found in Persia and India which could have been used to produce an edible fig. Therefore, it is possible, although no evidence exists, that figs were cultivated prior to the fourteenth century in Persia and India.

The fig spread slowly through Asia Minor and Syria to Mesopotamia, Persia, and the Arabian desert. Fig culture was still unknown in the lowlands between the Tigris and Euphrates (Solms-Laubach 1885) by the time it had been highly developed in Iran, Armenia, and Afghanistan. India first cultivated figs in the fourteenth century and edible native varieties are now found growing in the Punjab hills.

Figs supposedly reached China in 127 during the reign of the emperor Tschang-Kien, who supported an expedition to Turin, Italy, but some feel this early report is a myth. The fig is first mentioned by Chinese writers in the eighth century, and therefore it is generally thought figs reached China no earlier than the Tang period (618-907). Hia-tscheng-Shi in his work on Chinese trade, Yu-yang-tsa-tsu, speaks of tin-tin; tin is 'fig' in Arabic, from Fo-tin (Palestine). He mentions that this fruit was produced without blossoms, which is the appearance figs give. A type of fig, apparently not identical to our own, was grown in China in the fourteenth century. The first verifiable report of fig culture in China was that of the celebrated writer Le-Shi-tschen who described figs growing in Chinese gardens. From this point on it is safe to assume the fig was firmly established in the Far East.

Although well regarded in Egypt, the fig never assumed great prominence; a papyrus from 1552 B.C.. extols it as a tonic for the body. Tombs at Benihassan depict fig trees being harvested (Unger 1859; Zohary 1975). The spread of figs southward in Africa was even slower, not reaching South Africa until the nineteenth century.

B. New World

Figs were first introduced into the New World by Spanish and Portuguese missionaries. The Spanish historian Puente y Olea (1900) located records of European fig shipments from Seville, Spain to the West Indies in 1520. Oviedo y Validez (1526) tells of fig trees growing on the Island of Espanola (now Cuba). Then, as now, market protection existed. While the island was a Spanish colony, families were each allowed only one fig tree to prevent competition with the mother country (Canova 1910). Simultaneously, the Spanish also introduced figs to Peru in 1528 (Acosta 1590; Tamaro 1920).

From the West Indies figs spread to both coasts of the United States (Unger 1859, 1860).

Initially, they were quickly adopted by local populations. However, by the twentieth century they had become a thriving industry In the southwest and a dooryard tree In the southeastern United States.

1. Eastern United States. From Cuba, figs were introduced to Santa Elena (Parris Island, South Carolina) on the southeastern coast of the United States in 1575 and quickly spread throughout the region (Menendez 1500; Martinez 1577). Independently, they were introduced to Virginia from Bermuda in 1621 (Brown 1898). A town in Florida, established In 1763 by one Dr. Turnbull who sponsored the immigration of 1500 Greeks and Minorcans, was named New Smyrna, after the popular cultivar of fig produced there (Forbes 1821). In 1720, figs from France were introduced by the French missionaries to their colony, the Louisiana Territory (Hamilton 1910). Figs thrived throughout the region and reports of them in the Southeastern United States were numerous after this time (Brickell 1737; Berquin-Duvallon 1806; Nuttall 1821; Ash 1836; Starnes 1903; Evans 1904; Hall 1910; Hamilton 1910; Smith 1910; Sandford 1911; Gould 1919; Gray 1933; Snydor 1938; Bartram 1940).

However, while fig trees themselves quickly spread, predominantly north and westward, the development of an industry did not follow throughout the southeastern United States. The naturalist Bartram (1942) was surprised that figs were not more prevalent in Florida. Other historians remarked on the small size and lack of development of such a potentially lucrative industry (Bruce 1935; Beverly 1947). Walker (1919) stated that the fig tree". . . grows easily and luxuriantly-but there is no recorded effort of its being dried in marketable quantities, and it has never become as it might, a staple crop." This failure was not due to lack of interest on the part of influential horticulturists or nurserymen. Both Thomas Jefferson and the horticulturist Thomas Affleck actively imported and distributed new cultivars, primarily from France (Affleck 1842, 1844; Edwards 1943; Betts 1944; Hedrick 1950). Other enthusiastic horticulturists from Ohio, Illinois, and Washington, D.C. attempted to develop an industry in the same manner, offering new cultivars and publishing circulars detailing fig culture (Worthington 1869; Needham 1879; Benson 1886). One, G. F. Needham of Washington, D.C., wrote". . . no other crop can be raised which will give so certain and so large returns in our Middle and Northern States as that delicious fruit, the fig." A conversation overheard by Margaret Smith (1906), in a Washington, D.C. restaurant in 1835, underscores their popularity: "No nuts, raisins, figs, etc.?" "Oh, no, no, ma'am, they are quite vulgar."

Despite these efforts and an obviously successful fig tree culture in the southeastern United States, a fig industry failed to develop. Some records of failed attempts exist. J. K. Russell of Olustee, Florida, destroyed his orchard due to high labor costs and foreign competition (Reasoner 1891). This is interesting in light of the fact that competition from Old World countries is still one of the most pressing problems facing the California industry today. Other Florida plantings were given up as "unsuccessful" (Reasoner 1891) or were frozen out (Swingle 1893). Some successful records exist; in 1910 F. C. Reimer (1910) reported one orchard of figs in Raleigh, North Carolina, which "during the past five years netted the owner greater returns than any acre in other fruits in the eastern half of the state." However, these individual success stories are rare. H. P. Gould reported in 1919 that fig trees are common only

as garden or dooryard trees in the fig belt east of the Mississippi where they were found as large and lovely additions to historic towns, and estates (Irving, 1860; Orr, 1871; Hoppin, 1926; Sale, 1930).

2. Western United States. A complete history of the fig in California has been documented in detail by Wickson (1888), Eisen (1901), Roeding (1903), Swingle (1908), Rixford (1918), Butterfield (1938), and Condit (1933), and therefore, this review will only touch upon the main events.

In spite of the fact that figs were well distributed throughout the southeastern United States they did not spread initially from there to the western United States. Rather, they were imported from the West Indies to Spanish missions in Mexico. It Is generally accepted that they subsequently spread from Mexico to California with the Franciscan missionaries. The first California figs were planted in 1769 in the gardens of the mission at San Diego. These same figs were planted in the string of missions stretching northward to Sonoma, and according to Mission records, they existed in Santa Clara by 1792 and in Ventura by 1793 (Vancouver 1798). Hence, the first figs in California were 'Mission' or 'Franciscan' figs.

'Mission' figs remained the only figs in California until the arrival of American settlers from the east in 1850 who then imported a wide variety of figs from the eastern United States and Europe. These imports led to the establishment of the first commercial fig orchards in California. By 1867 there were over 1000 acres (400 ha) in the Sacramento Valley and 35 acres (15 ha) in the San Joaquin Valley. 'White Adriatic' was the most widely planted cultivar. A 27-acre (11 ha) orchard of 'White Adriatic' figs planted in Fresno in 1885 produced the first carload of dried figs sent east in 1889.

The 'White Adriatic' fig remained the most popular California fig until the twentieth century. W. A. Taylor (1898) wrote of the 'White Adriatic': (it) has many points of merit. . . but the fact that its quality when dried is inferior to that of the imported dried fruit from Smyrna has resulted in several efforts to introduce and grow the Smyrna type of fig." The first California introduction of its successor, the true Smyrna ('Lob Injir') fig, was made in 1880 by P, C. Rixford, manager of the San Francisco Evening Bulletin. Within ten years, more Smyrna cultivars were introduced by a Fresno nursery, the California State Board of Horticulture, and the USDA. These rooted cuttings and trees were planted in various San Joaquin and Sacramento Valley locations, including Governor Leland Stanford's Vina ranch.

All these imports grew vigorously, but they displayed a common problem. Although they profusely produced buds and set fruit, the fruit did not persist beyond walnut size; uniformly all fruits dropped by early summer. The widespread notion that worthless Smyrna cuttings had been distributed was quelled when Smyrna figs propagated from seeds produced the same result.

This problem renewed interest in the long simmering debate concerning pollination of Smyrna-type figs. Eisen had previously reported in detail the necessity of pollinating, or caprifying, Smyrna-type figs (Condit 1947). Not until 1890 when C. Roeding of Fresno demonstrated that caprification was necessary for fruit set did the California industry attempt to obtain the fig wasp, and its vehicle, the inedible monoecious caprifig. The first caprifigs entered California in 1890 with separate fig imports from Asia Minor (Swingle 1908). Smyrna, and Mexico. Repeated failures to successfully achieve pollination at this point led to the conclusion that each Smyrna cultivar required a specific blastophaga. Therefore, the USDA agricultural explorer W. T. Swingle continued collecting caprifigs from Greece and Algeria through the nineteenth century. Finally, mamme Smyrna-type figs that reached Fresno, California, in April of 1899 successfully issued wasps on June 23, 1899. This date is the 'true beginning of the California commercial fig industry.

The story of blastophaga's California' introduction has a colorful subplot. As early as 1868 a Mr. Gates of Modesto, California claimed to have a caprifig tree with a mamme crop that harbored the fig wasp (Swingle and Rixford 1911). Roeding (1910), the introducer of record, disputed the claim with Gates in parallel columns of the Dec. 29, 1910 California Cultivator. Roeding concluded his argument with: "Is it possible as a poor despised worm, ant, and fly, you have resided in Stanislaus county these many years? Oh! that I could believe it."

With Smyrna fig production now assured the fledgling industry set about promotion. "No horticultural event since the discovery and propagation of the navel orange can compare in commercial importance to the recent establishment of Smyrna fig culture in California. Its successful introduction into the state marks a new epoch in our fruit interests and those who engage in it first will reap large profits." Thus stated a promotional circular of the Ceres Fig Lands Company. As with many commercial ventures this initial assessment was true for a time, and the Smyrna fig, soon known as the 'California Smyrna' or 'Calimyrna', became its leading cultivar.

The beginning of the twentieth century through 1943 was the heyday of the California fig industry. By 1943, California had 34,499 acres (14,000 ha) of figs, 96% of it bearing and virtually all of it In the central San Joaquin Valley. The bearing crop area consisted of 40% 'Calimyrna', 26% 'White Adriatic', 18% 'Black Mission' and 15% 'Kadota'. The 1943 crop, largest of record, was 29,400 t merchantable and 6,700 t substandard grade fruit. From this zenith the industry entered a decline that persisted through 1972. At its nadir California fig area dropped to 16,628 acres (6,753 ha) with 93% of it bearing, and consisting of 54% 'Calimyrnas', 26% 'White Adriatic', 11% 'Kadota', and 10% 'Black Mission' figs. The primary reason for the decline was the perennial problem of foreign competition with its relatively low cost labor. This coupled with increasing domestic labor costs, encroachment of residential and industrial development into the primary production areas, and an unfavorable tax structure that taxed agricultural land on adjacent property rather than actual use, caused the California fig industry to decline.

The 1967 Arab-Israeli conflict, which closed the Suez Canal and therefore Mediterranean

shipping channels from the east, created a demand for California figs. The availability of abundant, inexpensive, irrigated land on the west side of the San Joaquin Valley as a result of the completion of the California Aqueduct, and the need to plant an early-bearing crop to defray taxes and stand-by water charges, facilitated new fig plantings. The net result was a resurgence in the industry starting with increased plantings in 1968. From 1973 through 1967 the industry area has fluctuated between a low of 15,910 acres (6,439 ha) in 1978 to a 1981 high of 21,520 acres (8,709 ha). The current cultivar percentage has shifted toward 'Calimyrnas' (59%) and 'Black Missions,' (16%), and away from 'White Adriatics' (19%) and 'Kadotas,' (7%) (California Fig Advisory Board 1988).

Currently, California ranks third in world fig production after Turkey and Greece, and ahead of Spain and Portugal. The state produces 100% of domestic fig production and 65% of the figs consumed in the country. In 1987 it produced a total of 15,000 t of figs with a total value of $16 million. Of the 26 noncitrus fruit crops produced in California, figs rank 22nd in value and 18th in bearing area (Moyer 1989).

The California fig industry has formed a mandatory California State Dried Fig Marketing Order for the purposes of grade and quality standard enforcement, market development, and production research support. The industry also voluntarily supports the California Fig Advisory Board and the California Fig Institute-organizations formed to administer product and market development, and production research,

III. BOTANY

A. Taxonomy

The mulberry family, Moraceae, to which figs belong contains 60 genera and possibly more than 2,000 species of trees, shrubs, vines, and herbs. Common edible figs and their pollinating counterpart, caprifigs, are members of the subgenus Eusyce within Ficus carica-a species characterized by only unisexual axillary flowers and by gynodioecism. It is the only member of its genus cultivated for its fruit. Several allied members of this subgenus closely resemble true Ficus species, and members intermediate in form between true Ficus and these allied species suggest hybridization among them. This could explain some of the difficulties among botanists with species delineation and characterization of Ficus spp. Numerous studies exist on the classification of Ficus (Condit 1955, 1969; Condit and Enderud 1956), but there are great disagreements. The estimated number of species in the genus Ficus range from 600 (Engler 1889; Lyon 1922, 1929; Ridley 1922, 1930) to 800 (Verdoorn 1938) to 900 (Corner 1933, 1960ab, 1962, 1964, 1965, 1967) to 1,000 (Condit 1969) to 1,500 (Sata 1944) to 1,600 (Krause 1953) to 2,000 (Merrill 1943).

With such a large number of fig species, and the obvious disagreement about classification within the genus, it would be expected that, without fruit present, common fig trees would be hard to distinguish from other Ficus app. However, its deciduous character and twig and leaf

characteristics make the common fig readily identifiable when using the keys devised by Condit (1941, 1969).

History of the Fig Nutritional Information Recipes Recipe Submission

Packaging/Sales Contact Us Email Fig Advisory Board Home