

Citrus ≈ 1913

The vision to start a citrus (*Citrus* spp.) industry (Figure XX) in Belize can be attributed to three pioneers who imported nine hundred budded grapefruit (*Citrus paradisi*) plants from Florida at a time when the banana industry in the Stann Creek Valley was growing after the Stann Creek Railway had recently been completed. In 1913, Dr. S. O. Browne originated an idea to plant citrus in the Stann Creek Valley and was joined by A. E. Vine (Manager of the British Honduras Syndicate) and W. A. J. Bowman, a banana grower in the Stann Creek District. Each imported 300 budded grapefruit of different varieties from Florida (Bowman, 1979). Bowman planted 286 of his Marsh and Duncan grapefruits on 4 acres in Sarawee while the other two growers established their plantings in Pomona (Bowman, 1955). For the first twelve years, no profits were made because marketing was difficult in the United States which vigorously protected its young industry in Florida. By 1924, W. A. J. Bowman began consolidating by purchasing Dr. Browne's cultivation and the colonial government acquired Vine's Pomona property. The government expanded Vine's property to 16 acres and built a nursery and packing shed. In 1925, H. T. A. Bowman, son of W. A. J. Bowman followed his father and established groves near Macaroni Hill in Pomona Valley.

The government further expanded the groves on Vine's Pomona property to 60 acres in 1932. By the late 1930s, other farmers became involved and over 1,000 acres of the seedless Marsh



Figure 1: A young citrus orchard in the Stann Creek Valley



Figure 2: Women working in the grapefruit sectionizing plant in Stann Creek.

grapefruit variety were established. W. A. J. Bowman's 4 acre grove in Sarawee was to serve as planting material for expansion of H. T. A. Bowman's farm and the farms of other planters whose banana investments had by this time been affected by Panama Disease.

From the late 1920s, grapefruits were being exported fresh in wooden boxes. On a number of occasions, the products were entered into fruit shows in the UK. Between 1928 and 1930, Belize won prestigious awards at fruit shows in Manchester, Birmingham and Leicester. At the Royal Horticultural Institute Fruit Show in 1928, Mr. Griffith Greenwich Robert (G. G. R.) Sharp of Jamaica became aware of the high quality of the fruit and visited Belize to purchase 2,045 of the 7,549 acres of the Middlesex Estate which the government had re-purchased from the United Fruit Company in 1921. By 1933, G. G. R. Sharp established a nursery using Jamaican farm workers whom he housed at Middlesex in facilities left over by the UFC. G.G.R. Sharp's Belize investments were managed by his nephew Frank Sharp who created the Citrus Company of British Honduras (CCBH) in 1933. The CCBH started with a packing plant capable of packing 100 boxes of fresh fruit and a juicing and canning factory (Figure XX). Canning was done on an oilstove which produced 5 cases per day. Frank Sharp was also instrumental in the founding of the British Honduras Citrus Association (BHCA) in 1934.

These processing facilities were transferred to Pomona in 1942. Transfer of the factory to Pomona meant that deliveries became easier for smaller farmers who became interested in this crop after two serious plant disease outbreaks had brought the banana industry to a virtual standstill. The citrus industry was not without its own technical and marketing challenges however. The most important of these was seen as early as 1937 when grapefruit trees with symptoms

of gummosis (*Phytophthora*) were noted. Drunken baymen flies which are a type of stingless bee (*Trigona* spp.) and wee wee (*Atta* spp.) ants were also identified as notable insect problems of the crop. During the outbreak of locusts between 1938 and 1943, the citrus orchards were protected by direct spraying of the insects with fuel oil and burning of the dead insects. Between 1942 and 1944, there was little commercial shipping due to German U-boat activity in the Caribbean. This almost resulted in the bankrupting of the industry which was eventually saved by a subsidy of \$10/acre in 1943 and \$20/acre in 1944 and 1945.

In 1945, a new citrus juicing plant was installed at the Pomona factory. Supported by a ten year contract signed with the British Ministry of Food in 1945, the acreage devoted to oranges increased from 30 acres in 1945 to 4,000 acres by 1955. This was timely because the first outbreak of Mexican fruit flies (*Anastrepha ludens*) in grapefruit was noted in 1946. A combination of small and large farmers like the British Honduras Fruit Company established various varieties of Valencia oranges (*Citrus sinensis*) especially in Alta Vista. Orange juice was exported for the first time in 1948 and 1949 but no market was found in 1950. Although times were lean, the Citrus Company of British Honduras installed a unit to produce citrus oil from the rind in 1952. Two years later, the sixty four farmers of the citrus industry reached the million dollar sales milestone. Another source of concern for the industry was the threat of the Mediterranean Fruit Fly. Visitors from the USDA confirmed that Belize was free of the Med Fly but they introduced traps to the citrus industry for surveillance of this pest.

Although plantings of citrus were slowing in the mid 1950s, there were 5,847 acres of orange, 1153 acres of grape fruit and 800 acres of limes in 1957. By the mid 1960s, orange juice exports were three times that of grapefruit. Orange oil also represented a notable income stream. The citrus industry was the most intensively managed industry in the country but *Phytophthora* dieback and the Mexican Fruit Fly were becoming notable problems.

In addition to the original processing factory founded by Frank Sharp, a second citrus juice processor was established by Salada Foods of Canada which began operations in 1962 (Figure XX). This factory started producing orange juice concentrate which was the new wave in juice technology. The “Salada” factory was purchased in 1969 by Kellogs and in 1979 by Nestle who changed the name to Belize Food Products (BFP) Ltd. The BFP factory has been upgraded at various points and now uses a highly efficient automated computerized FMC system which is geared toward the concentrate

juice market. BFP maximizes its profits by being more cost efficient than the CCB factory. In 1996, a collaboration between BFP and European investors saw the installation of a unit for the production of orange juice concentrate using a freeze crystallization process. This juice is not heat evaporated and a higher organoleptic quality of the product is captured which is marketed under the Top Juice^R trade name.

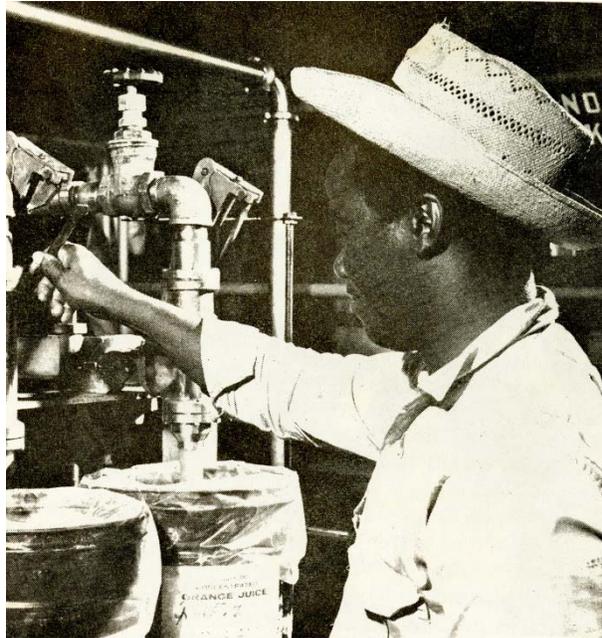


Figure 3: At the concentrate drum filling station in the Salada Factory.

Partly because of developing acrimony between small farmers and CCBH over fruit prices, the factory at Pomona was sold to a consortium headed by the Citrus Growers Association of Trinidad (50 per cent) and local Belize farmers in 1984. By this time the Zabaneh family were prominent citrus growers. Around this time, Brazil entered the world market for citrus on a large scale.

Since the 1980s, the Pomona factory has gone through various upgrades and today uses a Brown system of juice extraction which removes the orange and pulp from the inside of the fruit. This means that only a minimal amount of oil from the orange skin enters the juice. The juice, pulp cells and rag of the orange are easily separated. As a result, this factory produces a high quality Not-From-Concentrate (NFC) and pulp cell products. The main product

is, however, orange juice concentrate produced using a heat evaporation process.

In 1998, the Commonwealth Development Corporation (CDC) purchased both the Citrus Company of Belize and Belize Food Products factories and associated citrus orchards and consolidated these into a new company called Del Oro Belize. The Belize Citrus Growers Association Investment Company Limited acquired 10% of shareholdings in Del Oro in 2,000 and acquired an additional 89.78% in 2002. The name of the company was changed to Citrus Products of Belize Limited (CPBL) in 2002. The Belize Citrus Growers Association sought a strategic investor to invest in CPBL and settled on a company from Barbados called Banks Holdings. CPBL used the injection to begin producing a Tetrapak^R product for sale in the Caribbean. CPBL also signed a joint venture with a company in the Dominican Republic to produce cattle feed from the citrus pulp. Shortly afterwards, the relationship between CGA and Banks Holdings soured. Another notable challenge that has arisen in the industry has been the detection of the Citrus Greening disease in 2009. The CGA - Banks Holdings impasse and the discovery of Greening disease remain unresolved in 2013.