

Albert F. Etter Strawberry Breeder

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Fig. 1. Albert Etter as a young man.

Forty miles west of the railroad and 6 miles inland from the ocean, just back of the Coast Range in the dry hill country of northern California, at an elevation of about 1,000 feet, lived Albert F. Etter. In 1894 he made Ettersburg his home, and established his fruit breeding farm and nursery that supplied new genetic material to breeders and growers in this and foreign countries. One of his varieties is now grown in Europe and Australia, and others are in the ancestry of many of America's widely grown varieties.

At 18, he told of being first interested in breeding dahlias, red cur-

rants, and gooseberries. Young Albert left school at 15 years of age and worked at the home farm in Ferndale for the next 7 years. At 15 (1887), he grew his first seedling strawberries, seedlings of Sharpless x Parry. He used in his early breeding what he called the Peruvian Beach strawberry, said to have been brought to Eureka, California, from Callao, Peru, by a Capt. Cousins. Since the Peruvian beaches are desert and have no strawberries, this variety probably came from cultivated fields in the interior of Peru or possibly an irrigated field near Lima. Etter (1908) described it as a white, solid-fleshed, fragrant variety with a peculiar pineapple flavor, not fruitful, and less drought and cold resistant, and less vigorous than the local beach strawberries. Using this form of *chiloensis* pollinated with third generation seedlings from Sharpless x Parry, he fruited his first variety, Rose Ettersburg, in 1895, and introduced it in 1903. Later he used in his crosses selections of *chiloensis* from various points (Pigeon Point, Point Arena, Cape Mendocino) along the coast of California.

Mr. Etter also used one other species in his breeding, *F. ovalis*, the native octoploid of western United States, which he had under the names *cuneifolia* and *platypetala*, and also possibly at times as *californica*, a name properly applied to a woodland diploid *vesca* type. He had also the true *californica* as well as the *F. vesca semperflorens* of Europe. Both of the latter two were said to have been used

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in his crosses, but there is no evidence that either was successfully crossed. He also told of using *F. chinensis* or *F. duchesnei* in crosses; but what he had was *F. nilgerrensis*, a diploid. It does not seem to have entered into his varieties. At one time he gave the parentage of Red Cross as Etters 80 x *F. duchesnei*, at another time as Etters 216 x Trebla—the latter seems most likely.

Varieties which Etter reported as entering into his varieties include Sharpless, Northfield Junior, Dornan, Bederwood, "Michel's Early" (not true, as he records it as pistillate), Fendall, Parry, Wm. Belt, Dunlap, and Chesapeake. He discontinued his strawberry breeding about 1926, but continued his strawberry nursery and his apple and pear breeding (at least his testing of seedlings) for some years. I visited Mr. Etter at his home, July 23, 1926, and again May 7, 1932. During the early 1920's, many of his varieties and selections were tested at the U. S. Horticultural Station at Glenn Dale, Maryland, and more of them later. Dr. R. E. Clausen wrote-up Etter's work for the July, 1915, Journal of Heredity. Mr. Etter issued a few catalogues and wrote several articles in which he expressed some of his ideas.

Anyone who has seen hybrids of cultivated varieties with the cultivated forms of *F. chiloensis* from Ecuador, Peru, or Chile will understand the excitement of a boy of 15 and the crystallizing of his interest in strawberry breeding. Crosses of selections of *chiloensis* from the Pacific Coast beaches may give seedlings of enormous vigor of plants, and pistillate seedlings may be extremely productive of medium-sized, pale, mostly soft berries. But crosses of the South American varieties of *chiloensis* with cultivated varieties give seedlings not only with enormous vigor of plant but with fruit of largest size, and a great range

of flavors and firmness. For the most part, Etter grew seedlings of pistillate-flowered sorts. It is probable that the recorded ancestry of many of his varieties is incorrect. We are quite certain in some cases. For example, Ettersburg 121 is reported as Alpine *vesca* x Cape Mendocino *chiloensis*, and Trebla reported as having both the alpine *vesca* and the native *californica* form of *vesca* in its parentage. Both parentages seem wrong.

We do not know why Etter discontinued his breeding about 1926. We suppose that when he brought in plants from various sources he brought in virus and fungus diseases, and insects such as aphids, which spread virus diseases. Virus diseases were noted at his place in 1932; also what was thought then to be rhizoctonic root disease, could well have been red stele root rot, in part at least. Diseases such as these probably puzzled him as they did the rest of us, but he was isolated and may have lost some of his enthusiasm because of such troubles.

The Etter variety, still grown today, is supposed to be Ettersburg 80, called Huxley in Great Britain, and called E-89 in Australia. It is a large, rather ovate shaped variety which has a bright red glossy surface color and a white, smooth-textured, firm flesh. The plant is very vigorous and its leaves large, deep green, and glossy, and is quite tolerant of virus. It is the mother parent of Southland, introduced in 1931 by the U. S. Department of Agriculture, but which proved frost-susceptible. Although reported by Etter as [Rose Ettersburg x *californica*] x [Rose Ettersburg x Cape Mendocino beach (a *F. chiloensis* selection)], I do not think it is such a cross. Yet it was apparently derived in part from Rose Ettersburg.

As discussed in the January 1962 number of this publication, Fairfax probably resulted from a cross of

Ettersburg 450 (E-450) x Howard 17 or Howard Supreme x E-450. E-450 and E-904 were sweet, high-flavored, rich red, very firm, rather small-fruited varieties as grown in Maryland, but neither were very vigorous. They were much like Red Chilean in plant and fruit, except that the berries were far higher flavored, and were rich red to the center.

During the 1920's and early 30's, the E-121 was extensively grown for canning, chiefly in western Oregon. It was a firm-fleshed, meaty berry with high flavor, and a color that held up well in canning. Its cap came off easily, leaving little scar, and was usually left on the plant in picking. It was best adapted to the heavy, well drained soils of the Willamette Valley. Trebla and E-80 were also grown to some extent in Oregon and Washington. Etter's varieties were too subject to leaf spot to be of direct value in eastern States. E-445 and E-450 were the most resistant to spot in Maryland.

The 52 varieties and selections known to have been sent out by Mr. Etter by 1937, with their parentage and a few characteristics, are given in the Yearbook of the U. S. Department of Agriculture for 1937, pp. 491-

492.

The value of Mr. Etter's work (aside from E-80 and E-121, grown as varieties, and these and other selections which have entered into the parentage of varieties of other breeders) was in calling attention to the hybrid vigor and new characters obtained in crosses of cultivated sorts with *F. chiloensis*. Georgeson, in Alaska, had obtained some of the same results, but his selections, made under the long photoperiods of Alaska, were less usable than those of Etter.

In his writings, Etter emphasized the exquisite flavor of E-450, E-904, Bederarena, Bederarena Junior, and Kalicene; the excellent canning quality in E-121 and said to be in Trebla, Red four, E-450, Red Sugar, and Kalicene; the solid flesh with tough skin of E-450, E-904, and Lnge; the flesh color of E-121 that does not fade readily, said to be in Trebla and Lnge also; the ease of capping of E-121, Lnge, Alcatraz, and Trebla; the blossom frost-resistance said to be in Trebla and E-89; alkali resistance said to be in Rose Ettersburg and E-80; the mildew resistance of Fendalcino; and the drought resistance said to be in Red Cross, E-84, and E-500. Etter called attention to deep root systems

TABLE 1. Strawberry varieties originated by Albert Etter, and those having Etter varieties in their parentage.

Etter's varieties	Varieties derived in part from Etter Varieties
Bederarena	Nectarena
Delecto	Simcoe, King, Great Bay, Blaze, Strafford
E-80	Albritton, Louise, Southland Jubilee
E-121	Corvallis, Claribel, Northwest, Guardsman, Sharon, Wisc.-214, Wisc.-261
E-214	Elgin, Tupper, Phelps, Merrimack
E-450	Probably Fairfax and its descendants
E-512	Wright
Euresko	Redheart, Cal. Institute Z4
Fendalcino	Cupertino, Lassen, Cal. Institute-X2, Z4, and Z5A
Golden Gate	Black Lee, Canal
Norg	Borden
Red Sugar	Simcoe, Howe

he thought came from *chiloensis* and to runners of some *chiloensis* and its hybrids that lived to the second year.

While ill during 1938, he lost most of his strawberry material, and only a few of his varieties and selections are known to still exist. His genetic material now exists in E-80 and E-121 and in varieties of other breeders, derived in part from some of his varieties, as shown in Table 1.

Probably some of the germ plasm from Etter's varieties occurs in varieties introduced by D. Boyes, of England (see Amer. Soc. Hort. Sci. Register #15). The more important crosses made by the writer and associates (Carl Schuster and George Waldo) with Etter's varieties involved Beder-arena, Cream, Delecto, E-80, E-121, E-450, E-904, Euresko, Kalicene, Lnge, and Trebla (see Jour. Her., Nov. 1934).

Mr. Etter also did some apple and plum breeding, and at least grew cherry and pear seedlings, and during his later years gave most of his time to these fruits. Apple varieties introduced are included in Table 2.

TABLE 2. Apple varieties introduced by Albert Etter.

Alaska—patent 699—assigned to Geo. G. Roeding
Crimson Gold—Listed by California Nursery Company in 1945
Humboldt—Patent 658
Etters Gold—Patent 659—1945
Jonwin—Patent 710—1947
Pink Pearl—Patent 723—1947
Renidentia (P. R. Press, p. 484)
Wickson—Patent 724—1947

Articles by, or about, A. F. Etter

1. Building new types of strawberries at Ettersburg. Pacific Rural Press, Aug. 29, 1908, p. 132.
2. The mother of Albert F. Etter. San Francisco Monitor, Jan. 25, 1913, 101, 116.
3. Original work in breeding hybrid strawberries. Calif. Fruit Grower, March 29, 1913, p. 5.
4. Progress with Ettersburg strawberries. Pacific Rural Press, Nov. 22, 1913 p. 484.
5. California's Ettersburg strawberries. Pacific Rural Press, 1916, p. 281, 292, 293.
6. California has ideal canning strawberry. Pacific Rural Press, March 18, 1916, p. 348.
7. Making a canning strawberry. Pacific Rural Press, March 1, 1919, p. 309.
8. Ettersburg strawberries, by A. F. Etter, 68 pp. 1920. Eureka Printing Co.
9. Some thoughts of a strawberry breeder. Pacific Rural Press. Jan. 8, 1921, p. 108.
10. The Ettersburg (strawberries). The Oregon Grower, May 1921, p. 18.
11. Apple breeding at Ettersburg. Pacific Rural Press, Dec. 30, 1922.
12. Interesting description of Etter's new apples. Pacific Rural Press, March 10, 1923, p. 288.
13. Fifty years of experimenting brings fame to Ettersburg. Ferndale Enterprize, 1945, Jan. 19.
14. Improving nature's best berry. Pacific Rural Press 109: Feb. 7, 1925, p. 156.
15. History of Golden Gate strawberry. The Ferndale Enterprize, June 26, 1936, p. 3.

Biographical Note

Albert Etter was born November 27, 1872, at Shingle Springs, Eldorado County, California, into a family of 11 boys and 1 girl. In 1876, the family moved to Coffee Creek and later to Salt River, south of Eureka in the Eel River Valley. In 1894, he filed a homestead claim to 500 acres at Ettersburg and was joined there by his brother August. In 1924 he married Katharine A. McCormack, of New Jersey. He died November 13, 1950. There were no children.