

Sugar Cane, Sorghum and Corn Cultivation in California.

We extract from the report of Professor E. W. Hilgard, to the Board of Regents of the State University, a copy of which has been sent to us, the following in reference to the cultivation of sugar cane, sorghum and corn, for sugar-making purposes:

The continued interest on the subject of sugar production at home, as well as the desire for a greater diversification of crops, has induced numerous experiments in the growing of sugar-producing plants in the past season. This has especially been the case in the upper San Joaquin Valley, Kern, Tulare, and Fresno Counties. The cold, foggy summer has been a drawback to the development of the saccharine juices, and the results have probably been as favorable as they are likely to be. No samples of sugar cane have been sent for examination, but the reports thus far received have been encouraging. Whether the early frosts experienced this season have injured the cane, I am not informed.

Samples of sorghum were received from Bakersfield, Kern County, from Mr. J. W. A. Brooks, Secretary of the Kern County Improvement Association, under whose auspices seed was distributed last spring. The results of the tests are given in the following table.

No. 1 Early Amber, from Bakersfield, was considerably wilted when worked: Received October 5, 1880.

Nos. 2 and 3. The Imphee and Minnesota Amber cane, from Bakersfield, were rather wilted, but not so dry as No. 1. Received November 12 1880.

No. 4. The Amber from University grounds, was worked the same day it was cut—November 16, 1880.

No. 5. Cuzco corn, grown by Mr. Chabot, of Fruit Vale, near Oakland. Fresh, and very succulent. Received in October, 1880.

No. 1.—Early Amber, from Bakersfield; specific gravity of juice, 1.082; solid contents in juice, 19.87; percentage of cane sugar, 15.15; purity-coefficient, 16.75.

No. 2.—Imphee, from Bakersfield; specific gravity of juice, 1.066; solid contents in juice, 19.30; percentage of cane sugar, 9.30; purity-coefficient, 25.30.

No. 3.—Dark Early Minnesota Amber, from Bakersfield; specific gravity of juice, 1.100; solid contents in juice, 21.00; percentage of cane sugar, 14.3; purity-coefficient, 28.2.

No. 4.—Early Amber, University Grounds; specific gravity of juice, 1.078; solid contents in juice, 18.51; percentage of cane sugar, 13.67; purity-coefficient, 23.52.

No. 5.—Cuzco corn stalk, Oakland; specific gravity of juice, 1.050; solid contents in juice, 12.61; percentage of cane sugar, 7.65; purity-coefficient, 64.00.

It appears from the above table that the Early Amber Cane, even in the past unfavorable season, has, in Kern County, attained a sugar percentage almost equal to the average of Louisiana sugar cane, with a satisfactory purity coefficient, between 76 and 77; and even in the cool bay climate, and under the summer fogs of the Golden Gate, it has reached thirteen and two-thirds per cent., with an equally good purity-coefficient. The Dark Early Minnesota Amber has rather too low a purity-coefficient for sugar-making—at least at the time when tested. It seemed a little past the best condition.

The Imphee is very far inferior to the Early Amber, and, as the sample stood, would not even have made very good syrup.

The stalk of the Cuzco corn, though having a somewhat higher purity-coefficient than the Imphee and Dark Amber, would also serve for syrup only; and considering its low percentage in the juice, and smaller production on the same area, there can be no reason to prefer it to the Amber Cane. The latter seems therefore decidedly the crop to select for sugar-making, unless, indeed, the true sugar cane should yield a much better result than there is reason to anticipate—considering experience in the Southern United States. The rapid growth and early maturity of the Early Amber alone recommend it highly, as against the tardy maturity and frequent damage from frost that proverbially render the culture of the true sugar cane in Louisiana a matter of thirteen months work, and very liable to accident.—*Grocer and Merchant.*

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