

acetic, butyric and lactic acids during the earlier stages of fermentation. It was, therefore, found that the death of seedlings was due, (1) to one of simple asphyxiation by carbon dioxide and hydrogen, or in other words, displacement of oxygen by the gases mentioned above at the root zone of the seedlings, and (2) to the production of organic acids and the dissolution effect they may have had on minerals.

It was noticed in field as well as in pot culture house that these effects, both gaseous and acidic, passed off after a certain time, usually 2 weeks to a month, depending upon the biological population of the soil and the amount of molasses added, leaving the soil once again fit for the growth of seedlings (Abstract).

Crop and Trade Reports.

Paddy—1937-38—Second Fore-cast Report. The average of the areas under paddy in the Madras Presidency during the five years ending 1935-36 has represented 15.3 per cent of the total area under paddy in India.

The area sown with paddy up to 25th November 1937 is estimated at 8,595,000 acres. When compared with the area of 8,504,000 acres estimated for the corresponding period of the previous year, it reveals an increase of about 1.1 per cent.

The increase in area occurs in the Circars (Vizagapatam excepted), Cuddapah, the Carnatic districts, Chittoor, Trichinopoly, Tanjore and the Nilgiris. There has been a marked increase in Nellore (100,000 acres) and South Arcot (71,000 acres) and at the same time a large reduction in area in Vizagapatam (100,000 acres) and Tinnevely (75,000 acres).

The first crop has been generally harvested throughout the Presidency. Normal yields have been reported from Kistna, Kurnool, Cuddapah, Nellore, Salem, Coimbatore, Tanjore, Madura, South Kanara and the Nilgiris. The yield is expected to be below normal in the other districts. The crop has been affected by excessive rains in parts of Chingleput, South Arcot, North Arcot, and Trichinopoly; in the other districts it has suffered to some extent from drought.

The seasonal factor for the Presidency works out at 95 per cent, of the average as against 98 per cent in the corresponding period of the previous year.

The wholesale price of paddy, second sort, per imperial maund of 82½ lb, as reported from important markets on 6th December 1937 was Rs. 2-15-0 in Madura, Rs. 2-12-0 in Vellore and Chittoor, Rs. 2-11-0 in Tinnevely, Rs. 2-10-0 in Trichinopoly, Rs. 2-8-0 in Vizianagaram, and Hindupur, Rs. 2-7-0 in Masulipatam, Rs. 2-6-0 in Guntur and Kumbakonam, Rs. 2-5-0 in Ellore and Bezwada, Rs. 2-4-0 in Rajahmundry and Cuddalore, Rs. 2-3-0 in Cocanada, Rs. 2-2-0 in Anantapur and Conjeevaram, Rs. 2-1-0 in Negapatam and Rs. 2-0-0 in Mangalore. When compared with the prices published in the last report, i. e., those which prevailed on 8th November 1937, the prices reveal a rise of about eight per cent in Hindupur and Tinnevely, six per cent in Negapatam, five per cent in Vellore, and three per cent in Conjeevaram, and a fall of about six per cent in Anantapur, five per cent in Kumbakonam, three per cent in Coconada and Bezwada and two per cent in Madura, the prices remaining stationary in the other centres. (*Director of Industries, Madras.*)

Cotton Raw, in the Madras Presidency. The receipts of loose cotton at presses and spinning mills in the Madras Presidency from 1st February 1937 to 10th December 1937 amounted to 502,008 bales of 400 lb. lint as against an estimate of 533,100 bales of the total crop of 1936-37. The receipts in the corresponding period of the previous year were 603,279 bales. 419,408 bales mainly of pressed cotton were received at spinning mills and 204,373 bales were exported by sea while 103,784 bales were imported by sea mainly from Karachi and Bombay. (*Director of Agriculture, Madras.*)