

Gleanings.

Better Yeast is Made. A new process for the manufacture of bakers' yeast — conceived, researched and developed in Australia, is now on the way to improving the world's yeast industry and the world's bread. The new yeast has infinitely superior qualities and keeps for long periods without deteriorating even in a warm climate. It is known as the 'Deloffre Alcohol Process' after its inventor who took out world patent rights in 1940. Under the new process, many materials, additional to those generally employed, can be used but the yeast is formed in one operation, instead of several, by inoculating a highly concentrated sugar solution with a small culture of pure yeast, which is then fermented to produce a maximum quantity of alcohol. This is then used to form yeast under special conditions, produced to set up the required biological reactions under which yeast can absorb alcohol. Advantages of the process are many. Not only does it simplify the process of manufacture, but it reduces cost of production by about 30 per cent., while increasing the yield by from 20 to 25 per cent. One reason for the great saving in cost is that the mixture can be worked in much more highly concentrated forms than previously. Due to the high proportion of alcohol in the fermenting liquid, fermentation takes place under almost sterile conditions. The several operations necessary with the older processes made the growth of bacteria difficult to prevent. Further, the new process yeast is of exceedingly high keeping quality, because the alcohol reduces considerably the content of pepsin enzyme which is the agent of decomposition. Deloffre Process yeast has greater baking qualities with its substantially greater leavening powers, since it reacts in higher degree on the flour to generate a greater quantity of carbon dioxide gas. Less yeast need be used and because of its higher keeping quality, immediate use is not so necessary. During the war, when beet molasses was unobtainable, wheat starch was transformed into glucose which, in turn, was transformed into alcohol for use in the Deloffre Process. For manufacture of the yeast, a special all-steel building was designed and equipped with machinery almost entirely Australian-made. Pipelines for conveying the mixture from apparatus to apparatus were kept at minimum length while ensuring production of yeast, untouched by hand, that had good lasting qualities. They were so constructed that proper sterilisation was possible after each operation. Entire process was automatic. Australia used something like 8,000,000 lb. of bakers' yeast each year. By 1948, some 80 per cent. of the fresh yeast used in Australia for baking purposes was made by the Deloffre Alcohol Process. (Agricultural Newsletter No. A. G. N/230).

Agricultural College and Research Institute Library, Lawley Road, Coimbatore.

MONTHLY LIST OF ADDITIONS FOR JANUARY 1949

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| 1. HAMILTON (W. J.): American Mammals, their lives, habits and economic relations | 1932 |
| 2. WOLCOTT (Robert H.): Animal biology, Edn. 3 | 1946 |

Crop and Trade Report.

Raw Cotton. The receipt of loose cotton at presses and spinning mills in the Madras Presidency from 1st February 1948 to 31st January 1949 amounted to 366,614 bales of 400 lb. lint as against an estimate of 283,700 bales of the total crop of 1947-48. The receipts in the corresponding period of the previous year were 417,426 bales. 561,073 bales mainly of pressed cotton were received at spinning mills and 35,253 bales were exported by sea while 122,922 bales were imported by sea mainly from Karachi and Bombay. (From the Director of Agriculture, Madras.)