

Mr. C. R. Barnicoat, who was granted a Commonwealth Fund Scholarship in 1936, was absent from duty during the whole year while attending the Minnesota University at Minneapolis, United States of America, where he has been carrying out a research project on dairy chemistry of fundamental interest to the New Zealand dairy industry.

Mr. A. J. Wood, a graduate of the University of British Columbia, who came to the Institute in November, 1936, to undertake special studies returned to Canada in October, 1937. While at the Institute he made a study of the metabolism of lactic-acid bacteria, and an account of his work is embraced in a thesis submitted to the University of British Columbia.

Dr. W. J. Wiley, who was seconded for duty at the Institute in February, 1937, by the Australian Council for Scientific and Industrial Research, was a member of the staff for the whole year and took a leading part in the research work.

The presence of overseas workers at the Institute has been a decided advantage to its work and is a recognition of the importance of the Institution in the estimation of other countries.

Several changes in the personnel of the laboratory, dairy factory, experimental milking-shed, and office general staff occurred during the year.

DISSEMINATION OF RESULTS OF WORK.

A meeting lasting three days was held from 27th April to 29th April to explain to dairy factory managers and first assistants the research work carried out in the past season. This meeting was attended by approximately sixty managers and first assistants, drawn from all parts of the Dominion, and was appreciated by all. During the year addresses were given by members of the staff at the National Dairy Conference and at meetings convened by the New Zealand Factory Managers' Association, by the South Island Dairy Association, and by dairy companies. Demonstrations of the Institute methods of propagating starter cultures were given by members of the staff in certain cheese-factories where the Institute had been asked to investigate difficulties experienced in maintaining vitality of starters.

A monthly article on dairying was contributed to the *New Zealand Exporter*, and the following technical publications have been issued during the year :—

Institute Publication No.	Title.	Author.	Journal.
85	Experiments in the Packing and Storage of Butter ..	C. R. Barnicoat ..	<i>N.Z. J. Sci. & Tech.</i>
89	Studies on the Chemistry of Cheddar-cheese Making. Part VII—Acidity in Cheese: The relation between Hydrogen Ion Concentration, Titratable Acidity, and Quality in Cheese	R. M. Dolby, F. H. McDowall, and W. Riddet	<i>J. Dairy Research.</i>
101	Studies on the Neutralization of Cream for Buttermaking—Part V: The Reaction of Sodium Bicarbonate on Milk and Cream and the Effect of Pasteurization on the Reaction	F. H. McDowall and A. K. R. McDowell	<i>N.Z. J. Sci. & Tech.</i>
102	Studies on the Neutralization of Cream for Buttermaking. Part VI—Factors affecting the pH of Salted Butter: The Relation of pH to Quality of Salted Butter	F. H. McDowall, J. W. Smith, and A. K. R. McDowell	<i>N.Z. J. Sci. & Tech.</i>
103	Milk-supplies to Cheese-factories	F. H. McDowall ..	<i>N.Z. J. Sci. & Tech.</i>
104	The Titratable Acidity and pH of Butter	W. J. Wiley ..	<i>N.Z. J. Sci. & Tech.</i>
105	The Effect of Acidity on the Keeping-quality of Unsalted Butter	W. J. Wiley ..	<i>J. of C.S.I.R. (Australia).</i>
106	Annual Report, 1936-37
107	Experiments on the Packing and Storage of Butter—II: Storage of Butter at Chilling Temperatures	C. R. Barnicoat ..	<i>N.Z. J. Sci. & Tech.</i>
108	Experiments on the Packing and Storage of Butter—III: Factors Influencing Surface Defects of Butter	C. R. Barnicoat ..	<i>N.Z. J. Sci. & Tech.</i>
109	Experiments on the Packing and Storage of Butter—IV: Wrapping-materials and their Properties	C. R. Barnicoat ..	<i>N.Z. J. Sci. & Tech.</i>
110	Butterfat Losses in Buttermilk	F. H. McDowall ..	<i>N.Z. J. Sci. & Tech.</i>

The following are in the press :—

Institute Publication No.	Title.	Author.
111	Solubility of Cheddar Cheese in Sodium Chloride	F. H. McDowall and L. A. Whelan.
112	Storage of Cheese at Freezing Temperatures	F. H. McDowall.
113	Starter Cultures for Cheese-manufacture: Maintenance of Acid-producing Activity in Cultures of Lactic Streptococci	H. R. Whitehead and G. J. E. Hunter.

As in the past, the Institute is much indebted to the Massey Agricultural College for the use of the College herds, buildings, and plant, and it is desired to express to the Board of Governors the thanks of the Institute for this privilege. It is also desired to acknowledge the ready co-operation afforded by the Dairy Board, by the Director and staff of the Dairy Division of the Department of Agriculture, the Grasslands Division of the Plant Research Bureau, the Primary Products Marketing Department, and by a number of commercial organizations. To all of these it is desired to express the grateful thanks of the Institute.