INVESTIGATIONS ON THE NATURE AND
PROPERTIES OF SOME PLANT VIRUSES

THESIS SUBMITTED FOR THE DEGREE OF
DOCTOR OF SCIENCE

IN THE UNIVERSITY OF ADELAIDE

BY

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INVESTIGATIONS ON THE NATURE AND PROPERTIES OF SOME PLANT VIRUSES.

Submitted for the degree of Doctor of Science by Rupert J. Best.

PREFACE.

Regulation 2 "Of the Degree of Doctor of Science" requires:

(1) that "a candidate shall furnish satisfactory evidence that he has made an original contribution of distinguished merit adding to the knowledge or understanding of any subject with which the faculty is directly concerned," and

(2) that "every candidate in submitting his published work and unpublished original work shall state generally in a preface and specifically in notes the main sources from which his information is derived and the extent to which he has availed himself of the work of others. He may also signify in general terms the portions of his work which he claims as original."

With reference to the first requirement I can only point out that my published work has been widely used and quoted by fellow workers throughout the world in their published papers and reviews and in such books as "Plant Viruses and Virus Diseases" by F. C. Hawdon (Chronica
LIST OF PUBLICATIONS SUBMITTED


5. "Precipitation of the Tobacco Mosaic Virus Complex at its Iso-electric Point." by Rupert J. Beat.


8. "The Relationship Between the Activity of Tobacco Mosaic Virus Suspensions and Mydriat Concentration over the pH Range 5 to 10," by Rupert J. East.


12. "On the Presence of an Oxidase in the Juice Expressed from Tomato Plants Infected with the Virus of Tomato Spotted Wilt." by Rupert J. East.


24. "On the Rate of Inactivation of Tobacco Mosaic Virus by Potassium Salicylate by Rupert J. Best.

25. "The Effects of Infection of Tobacco Plants (Nicotiana Tabacum) with Tobacco Mosaic Virus on some of the properties of the Protein present in the leaves." by J.W.H. Lugg and R.J. Best.


27. "Inactivation of Tomato Spotted Wilt Virus by Salicylate." by Rupert J. Best.


29. "The Constancy of Chemical Composition and Infectivity per Unit Weight of Tobacco Mosaic Virus Protein Prepared over a Period of Years." by Rupert J. Best.


Notes:
(a) The papers have been arranged as nearly as possible in the order of their appearance. Papers 3 and 4 (jointly with Samuel) appeared