

CONTENTS

List of contributors vii Preface ix

Disease and crop yield: the problems and prospects for agriculture

G. E. Russell 1

Photosynthesis in healthy and diseased plants

B. B. Buchanan, S. W. Hutcheson, A. C. Magyarosy & P. Montalbini 13

Energy use and metabolic regulation in plant-pathogen interactions

T. Kosuge & J. A. Kimpel 29

Patterns of translocation, storage and interconversion of carbohydrates

J. M. Whipps & D. H. Lewis 47

Transport of host assimilates to the pathogen

J. L. Gay & J. M. Manners 85

Effects of root-infecting fungi on structure and function of cereal roots

D. Hornby & B. D. L. Fitt 101

Effects of disease on plant water relations

P. G. Ayres 131

The involvement of growth regulators in the diseased plant

G. F. Pegg 149

Alterations in secondary metabolism

J. Friend 179

Disease and crop physiology: a modeller's point of view

R. Rabbinge & F. H. Rijsdijk 201

Index 221