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INDIAN CENTRAL COTTON COMMITTEE.

STUDIES IN THE PHYSIOLOGY OF THE BROACH COTTON PLANT

BY

K. V. JOSHI, M.Ag., R. B. GODE, M.Sc., and A. K. SHAH, B.Ag.

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PREFACE.

The object in writing this detailed report is to place on record all the data collected during a period of nine years on the problem of bud and boll shedding in cotton. The research developed into diverse branches and was carried out by a number of workers under the direction of the senior author who was in charge of the investigation throughout the whole period.

Mr. S. B. Ranade, B.A., M.Sc., worked as the first senior assistant for a period of six months. In 1924, Mr. B. M. Dabral, M.Sc., took the place of Mr. Ranade and continued till 1927. Thereafter, he left this work to enable him to take charge of a similar investigation in Sind. His place was subsequently filled by Mr. S. V. Godbole, B.Ag., M.Sc. The late Mr. N. M. Nitimargi, M.Ag., worked from 1923 to 1929. In 1929, he proceeded to England for prosecuting higher studies. He was succeeded by Mr. G. B. Patel, B.Ag., who was later transferred as Cotton Breeder and placed in charge of the Cotton Wilt Research Scheme at Broach. Mr. S. S. Sirur, B.Ag., worked during the years 1930 and 1931.

Mr. A. K. Shah, B.Ag., had been working all along since the commencement of the project till its completion and rendered substantial help in the preparation of this publication. Mr. R. B. Gode, M.Sc., joined the investigation in 1926 and continued to assist till the completion of the work. He shares with the senior author the responsibility of writing this report.

In addition to these regular assistants, two research scholars, Mr. M. A. Shama Iyengar, B.Ag., and Mr. R. N. Gidwani, B.Ag., also worked—the former during 1926 to 1929 and the latter for a short period in 1928.

To all these workers the senior author offers his most sincere thanks for their loyal co-operation and willing help, without which the investigation could not have been brought to a successful termination.

We are also obliged to Mr. R. S. Kasargode, L.Ag., and Mr. B. P. Deshpande, who were in charge of the Entomological Research Scheme on Cotton Boll-Worm at Surat for their being accessible for occasional consultation and for willing co-operation from time to time.

We have also to thank the authorities in charge of the Agricultural Station, Surat, for their assistance in various ways during the course of this investigation.

We take this opportunity to express our deep sense of gratitude to Dr. H. H. Mann, D.Sc., ex-Director of Agriculture, Bombay, but for whose ardent love of scientific research and masterly guidance of the investigation, especially during the first five years, the work would not have progressed in a satisfactory manner. His annual visits to the station, characterised as they were with much critical and synthetic discussion, helped in no small measure the progress of the entire project, besides being a source of perennial inspiration for the workers concerned in their respective branches of research converging on the main problem of investigation. After the retirement of Dr. Mann, the heavy responsibility of guiding this research in all its ramifications fell on Dr. W. Burns, D.Sc., the Economic Botanist to the Government and at present Director of Agriculture, Bombay. His solicitude for the progress of the work and his sympathetic understanding of all problems connected therewith have enabled the authors of this report to record the enormous mass of data obtained during a sufficiently long period of nine years.

Our thanks are also due to Mr. T. F. Main, B.Sc., O.B.E., who succeeded Dr. Mann as Director of Agriculture, for his sympathetic attitude in continuing this research during his regime.

The authors are equally grateful to Mr. B. C. Burt, B.Sc., C.I.E., M.B.E., the first Secretary of the Indian Central Cotton Committee. The present investigations are mainly the result of his conviction about the necessity and usefulness of agricultural research. He took a very great interest in this project during his Secretaryship of the Indian Central Cotton Committee for a period of nine years.

The present work has benefited immensely by the advice and criticism of Mr. N. V. Kanitkar, M.Ag., B.Sc., Soil Physicist to the Government; Rao Bahadur D. L. Sahasrabuddhe, M.Ag., M.Sc., Agricultural Chemist to the Government; and Principal V. G. Gokhale, L.Ag., Professor of Agriculture, all of whom made it convenient to pay occasional visits to the Research Station during the whole period of the investigation. They deserve our warmest thanks for this labour of love and especially for the troubles taken by them in going through the manuscript of the present report very critically at great personal inconvenience.

Our thanks are also due to Dr. L. A. Ramdas and Dr. R. J. Kalamkar of the Indian Meteorological Department for their help in statistical work and interpretation of the meteorological data connected with this report.

Finally, we have to acknowledge very gratefully our deep sense of obligation to the Indian Central Cotton Committee who provided the sinews of all the research imbedded in the present report and but for whose scientific attitude towards agricultural research and unstinted financial support the present Scheme would not have come to fruition.

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K. V. JOSHI, Senior Author.

POONA, Dated 31st July, 1933.

.

ii

CONTENTS.

| CHA | PTE | RI. | |
|-----|-----|-----|--|

Introduction and review of literature

. .

• •

CHAPTER II. . .

Conditions of crop production

Climatic factors-Rainfall-Air temperature-Humidity-Wind velocity.

. .

Soil and some of its properties—General description—Homo-geneity of the soil—Soil-moisture—Capillary movement— Water delivering power of the soil—Unfree water—Plant-food in the soil—Total and organic nitrogen—Ammoniacal nitrogen—Nitrous and nitric nitrogen—Soil temperature -Influence of air temperature on soil temperature.

Method of raising the cotton crop-Pests and diseases-Summary.

CHAPTER III.

Development of the cotton plant under crop conditions . .

Development of the root system-Method of sampling-Method of excavating the root system and of recording the root data-General structure of the root-system-Development of the tap-root-Roots of the first, second and third order-Total number of roots of all orders.

Development of shoot-The stem and its system of branching—Growth of the main stem—Leaf production—Produc-tion of vegetative-buds—Production of flower-buds—Proportion of vegetative buds to flower-buds.

Development of reproductive organs and their shedding-Development of reproductive organs and their shedding--Growth of flower-buds--Age of buds at flowering--Flower-ing--Development of bolls--Bearing of bolls by branches --Extent of bud-shedding--Time of bud-shedding--Total bud-shedding--Size of shed buds--Age of shed buds--Symptoms of shed buds--Relative bud-shedding--Bud-shedding on different kinds of branches--Extent of boll-shedding--Boll-shedding relative to flower formation --Age of shed-bolls--Size of shed bolls--Symptoms of shed bolls--Efficiency of bud and boll retention--The yield --Summary. -Summary.

35 . .

. .

PAGES.

5

1