PROLOGUE

Considerable in-depth research has been undertaken at Aligarh by Afridi, Samiullah and their associates during the last four decades on the fertiliser requirements of cereals, seed legumes, oilseeds and medicinal and aromatic plants. Successful attempts have been made to exploit various techniques, including split application of fertilisers, particularly supplemental foliar feeding, to boost productivity and quality of traditional and newly evolved high yielding varieties. Attempts have also been made to explore the possibility of fertiliser economy using these techniques.

As part of this team, the present researcher obtained the Ph.D. degree in 1984 on his thesis entitled "Mineral Nutritional Studies on Yield and Quality of Mustard" and published 25 research papers during the last twenty years. The photo-copies of these are appended at the end of the present thesis.

In addition, he also guided successfully the Ph.D. work of two students in the field of oilseeds and of another in the field of medicinal plants. It was during the course of supervision of the research work of the latter that his attention was drawn towards the growing universal acceptability being received these days by medicinal herbs. Among them, the common alliums fascinated him most and he started post-doctoral research in this unexplored field in 1994. The highly satisfactory preliminary results encouraged the continuation of the work and the data obtained during four years are presented in the form of this thesis.