Preface

The reports appearing in newspapers are not comfortable. Twenty five million more children will go hungry by the middle of this century as climate change leads to food shortages and soaring prices for staples such as rice, wheat, maize and soya beans...... According to the international food policy research institute (IFPRI) the children of 2050 will have fewer calories to eat than those in 2000. This work is a humble and sincere attempt to combat the growing menace of food insecurity. The thesis is compiled in eight chapters.

Chapter 1 deals with the general introduction and review of literature. Chapter 2 gives the description of the plants under study. Chapter 3 describes the phenology and physiology of the plants. From chapter three onwards each chapter contains introduction, review of literature, materials & methods, results and discussion. Interpretation of the results is given systematically in results and discussion of each chapter. Tables and figures (graphs) are placed at the end of discussion. Photographs are inserted at relevant places in the chapters. Chapter 4 deals with proximate principles and dietary fiber. Mineral composition of the grains is given in chapter 5. Chapter 6 depicts the rat feeding experiment. The formulations of the newly developed recipes is given in chapter 7 and the summary of the work is portraited in chapter 8. The combined references for all the chapters are given at the end of the volume.

Philo T.J.