

CONTENTS

Acknowledgement -	(i-ii)
Preface -	(iii-iv)
Glossary of symbols -	(viii)
Chapter I: General Introduction	(01 - 34)
• Introduction and Review of literature	
• Utilization and fate of fixation products	
• Nitrification	
• Denitrification	
• The entry of ammonia into organic combination	
• Nitrogenous fertilizers	
• Micronutrients used as fertilizer	
• Other factors governing the effect of fertilizers	
Chapter II: Materials and Methods	(35 - 48)
• Experimental technique	
• Effect of different levels of nitrogen on the chemical composition of grain and husk of muskon and pro agro-6444 varieties of rice	
• Effect of different modes of application, form and sources of nitrogen fertilizers on the chemical composition of pro agro-6444	
• The studies of effect of trace elements on the chemical composition of rice grain and husk of pro agro-6444	
• Methods of analysis for grain and husk	
• Crude protein	

- Albuminoid nitrogen
- Total carbohydrates
- Calcium
- Phosphorus
- Copper
- Iron
- Manganese
- Zinc

Chapter III: Studies of different levels of nitrogen intake on the chemical composition of grain and husk of local and hybrid varieties of *Oryza sativa* (49 - 115)

- Experimental procedure
- Result and discussion
- Effect of different levels of nitrogen in the total nitrogen/crude protein content of rice grain and husk of muskon and pro agro-6444
- Effect of different levels of nitrogen on non-protein nitrogen content of rice grain and husk of muskon and pro agro-6444
- Effect of different levels of nitrogen on the total ash and insoluble ash content of rice grain and husk of muskon and pro agro-6444
- Effect of different levels of nitrogen on trace elements viz. Copper, Iron, Manganese and Zinc content of rice grain and husk of muskon and pro agro-6444

Chapter IV: Effect of trace elements and iron pyrites on chemical composition on rice grain and husk of PHB-71 (116 - 179)

- Iron pyrites for reducing ammonia volatilization losses from fertilizer urea applied to a sandy clay loam soil
- Effect of certain trace elements on chemical composition of rice grain and husk of PHB - 71
- Effect of certain trace elements on albuminoid nitrogen content of rice grain and husk of PHB - 71
- Effect of certain traced elements on total amino acids content of rice grain and husk of PHB - 71
- Effect of certain trace elements on total and insoluble ash content of rice grain and husk of PHB - 71
- Effect of certain trace elements on copper content of rice grain and husk of PHB -71

Chapter V: Studies of bio-chemical effect on chemical composition

(180-191)

Bibliography:

(192 - 205)
