PREFACE

Soil organic matter (SOM) is a critical component of the soil-plant ecosystem and has been considered as a key indicator of soil quality. The quantity and quality of SOM may vary in arable systems depending on the crops and management practices.

Most of the rubber plantations in Kerala are at the end of the second or in third cycle. The rubber growing soils are highly weathered and declining in SOM content. Though the SOM decline is reported, detailed investigation on SOM quality or on different SOM pools is lacking necessitating a study to characterize soil properties and different SOM pools in major land use patterns in rubber cultivation in three locations where rubber cultivation is concentrated.

The details of the study conducted along with data generated and conclusions arrived have been presented in five chapters. The first chapter introduces the topic and describes the main objectives of the study. A review of different aspects of the study is presented in the second chapter. The experimental details and methodology followed in the study are explained in third chapter. In fourth chapter the results obtained and discussion of the results are presented. Summary and conclusions are given in fifth chapter, while the bibliography of references cited in the study are included at the end of this thesis.