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PREFACE

Mulberry plant is a well-known medicinal plant. The plant is commonly known as *Morus*, the genus of a flowering plant belonging to the Moraceae family. In Asian countries, mulberry plant has been grown to produce silkworms as the leave is a major and important nutrient source for silkworms. Mulberry not only used in cooking and silk but it also provides a number of health benefits that make them highly appealing.

This book aims to provide a brief and simple description of the background, agronomy aspects and physicochemical properties of mulberry plant. This book will provide readers a comprehensive aspect of pre-processing methods of mulberry plant, and the potential of this plant as antimicrobial agent. Finally, this book also provides readers with a self-contained guide on the application of statistical analysis in mulberry plant related research.

Therefore, this book is designed as a quick reference text, with the aim that researchers, students, academicians with little experience in mulberry plant could grasp their understanding of the scientific aspects of the plant. This book will also be of significant interest to those working or doing research in the applied sciences.

Siti Nuurul Huda Mohammad Azmin Huck Ywih Ch'ng





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PRE-PROCESSING OF MULBERRY LEAF AND FRUIT

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INTRODUCTION

Mulberry (*Morus* spp.) is an ubiquitous plant that can be found across the world. Due to high adaptability in diversified climates and soil conditions, the mulberry plant is recognized as a unique plant (Rohela et al., 2020). The plant belongs to the Moraceae family with three different species as white (*Morus alba*), red (*Morus rubra*), and black (*Morus nigra*), which all are essential in human livelihood. As this plant is fast-growing, it grows to about 15-20 meters on average with abundant foliage (Figure 2.1).