Introduction
INTRODUCTION

*Phyllanthus amarus* Schum. & Thonn. (Euphorbiaceae) finds a reputed place especially in Indian Pharmacopoeia. The genus *Phyllanthus* has more than 40 species with highly varied habits and habitats. *Phyllanthus amarus* is popularly known as “Bhumyamalaki” in Sanskrit and “Keezhaanelli” in Tamil and plays an important role in folk remedy for the treatment of a variety of human ailments, especially jaundice (yellow fever) caused by Hepatitis B virus (Thyagarajan et al., 1998).

Plant products are used as main sources of medicine throughout the world for treating various human ailments. About 50% of the present day medicines in the United States of America are derived from natural sources especially from various plants (Copping, 1996). According to World Health Organization, as many as 80% of the world’s population depend for their primary health care on traditional medicine, which are of plant origin. The use of traditional medicine in both developing and developed countries is significantly increasing in recent times (Rajasekharan, 2001).

The increased knowledge of antiviral property of *P. amarus* has developed great demand for the plant, which has triggered indiscriminate collection from the natural flora. Moreover, availability of the plant is subjected to seasonal variations, which lead to uncertainty in sustainable and constant supply of the plant materials throughout the year (Rajasubramaniam and Pardha Saradhi, 1997).
The multidimensional exploitation of this herb by the multinational pharmaceutical companies for manufacturing different therapeutic preparations needs continuous, uninterrupted and abundant supply of the plant. In view of the rising exports and domestic demand for *P. amarus*, the cultivation of the herb is to be promoted. Hence, large-scale cultivation of the herb using standard agrotechniques assumes significance.

The qualities of plants tend to vary when grown under different ecological conditions. However, by adopting the standard cultivation practices, the variation in the quality of plants can be minimized. Harvesting, drying and storage conditions can also influence the quality of the raw material. Therefore, these procedures need to be standardized.

*Phyllanthus* offers much scope for investigation of different perspectives such as pharmacognosy, phytochemistry and pharmacology. *Phyllanthus amarus* is currently being marketed under a number of trade names such as Virohep (Keezhaṭnelli capsule), Lovanthin, Liv-52, etc., (Plate 1). The commercial demand of this plant is expected to grow voluminously in the forthcoming years. For ensuring the quality of the raw material in surplus amounts, mediculture of this herb is highly encouraged and desired. Since the literature on cultivation and other related issues of *P. amarus* is limited, fragmentary and scattered, an attempt has been made to standardize the cultivation practices and establish certain phytochemical and pharmacognostic studies.
LOVANTHIN
FORTE TABLETS
SYRUP

Adults: 10 ml. t.i.d.
Children: 5 ml. t.i.d.

1 Tablet b.i.d.

-Chronic Active Hepatitis-B
-Acute Viral Hepatitis
-Asymptomatic carriers of Hepatitis-B
The present investigation primarily aims to standardize the agrotechniques, which focuses on optimising soil type, seed rate, time of sowing, irrigation, plant protection and harvesting. Experiments were also carried out to determine the effective storage methods. In addition, the phytochemistry of *P. amarus* has also been explored. Since other species of *Phyllanthus* closely resemble each other in morphological features, pharmacognostic studies have been taken up to differentiate *P. amarus* from other co-existing species.