

# **Biotechnologies towards Sustainable Development in Malaysia**

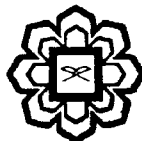
**Zarina Zainuddin**

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*Zarina Zainuddin*



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## Chapter 17

# Studies on agronomy, breeding and genetics of *Stevia rebaudiana* (Bertoni) in Malaysia

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### Introduction

*Stevia rebaudiana* Bertoni is a natural sweetener plant with zero calorie content and it becomes an inevitable alternative to sugar especially with over 346 million diabetic population across the world. (WHO, 2011). Stevia, also known as sweet leaf, or sugar leaf is a genus of about 150 species of herbs and shrubs (Robert, 2010), a member of the family Compositae and a native to Paraguay (Mark, 2009). It was long known to the Guarani Indians of the Paraguayan highlands who called it caá-êhê, meaning sweet herb. Sweet steviol glycoside is extracted from stevia leaves. Currently over 3 million Malaysians are diabetic and the need for this alternative sweetener substitute cannot be over emphasized. The crop became known in Malaysia about five years ago for its potential as a natural sweetener to substitute sugar in yearly increasing number of diabetic patients and also for its propensity to become a commercial crop, though it was long introduced since 1970s (Berita Harian, 2010 ). Efforts by the Malaysian government, local industries and farms to bring the crop into lime light in order to reduce or efface sugar consumption among the populace (The Star, 2010). The A'Azam Group, a local company, with the cooperation of its subsidiary, BNG Global Holdings Sdn Bhd, was also involved in research