

Biotechnologies towards Sustainable Development in Malaysia

Zarina Zainuddin

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Chapter 27

Antibacterial activities of green and ripens banana peel (*Musa*, AA cv. Sucrier) in Malaysia

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Introduction

The continuous evolution of bacterial resistance to currently available antibiotics has necessitated the search for novel and effective antimicrobial compounds. Globally, plant extracts are employed for their antibacterial, antifungal and antiviral activities. It is known that more than 400,000 spp. of tropical flowering plants have medicinal properties and this has made traditional medicine cheaper than modern medicine (Odugbemi, 2006). Some plant decoctions are of great value in the treatment of diarrhoea or gastrointestinal disorder, urinary tract infections, skin infections, infertility, wound and cutaneous abscesses (Meyer *et al.*, 1996). The antimicrobial and antibacterial activities of phytochemicals have long been studied for the potential of discovering new and more potent antibiotics. As a result, about 60 percent of the 877 small molecule new chemical entities (NCEs) and 79 percent of all small molecule antibacterial introduced ad drugs worldwide between 1981 and 2002 are traced back to natural products. Their success came from their great structural diversity, interaction and bioactivity, which is mostly seen in the field of antibiotics (Luzhetskyy *et al.*, 2007). Much of these phytochemicals antibiotics have achieved success as either a main treatment or as an alternative