Pharmacognosy Communications
Volume 2 | Issue 2 | Apr-Jun 2012
www.phcogcommn.org

The Janus Corner

Australian Honey Proves to be a Sweet Antibacterial Agent

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The majority of antibacterial agents from natural sources have come from plants, fungi or bacterial organisms.[1] In comparison, the number of useful antimicrobial agents derived from animals/animal products is relatively small. Honey has long been known to have antibacterial properties and has been used in the treatment of wound infections since ancient times. The antibacterial potency of honey has been shown to be linked to the levels of the active constituent methylglyoxal (MGO). The higher the MGO level, the more potent the honey is as an antiseptic. Until recently, the 'gold standard' for antibacterial honey has been Manuka honey (produced by bees feeding on *Leptospermum scoparium*) due to its high levels of MGO. However, recent studies by a Brisbane based team have indicated that honey produced by bees feeding on a related Australian native plant *Leptospermum polygalifolium* (commonly known as jelly bush or lemon-scented tea tree) has the highest MGO levels of any honey, even higher than the levels in Manuka honey.[2] Levels of MGO have regularly been recorded in *L. polygalifolium* honeys at >1750 mg/kg, indicating that it could be useful in the treatment of super-resistant bacteria. The team is further evaluating the antibacterial activity of the honey and investigating the synergistic effects of MGO with other constituents in the honey to increase its potency

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DOI: 10.5530/pc.2012.2.13