



ID 49: Antibacterial activities of *Musa acuminata* L. Peel

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n-hexane, chloroform and water extracts of (*Musa acuminata* L.) green and ripe banana peel were evaluated for antibacterial activity. A total of 4 bacterial strains (*Salmonella typhimurium*, *Shigella flexneri*, *Bacillus subtilis*, *Enterococcus faecalis*) were selected and antibacterial efficiency of crude extracts were assessed by well diffusion test via measuring inhibition zones formed in agar plate at three different dosages (100mg/mL, 200mg/mL and 500mg/mL). The results showed that n-hexane and chloroform extracts of green banana peel produced significant inhibition zone against Gram-negative bacteria *Salmonella typhimurium* at dosage of 500 mg/mL. Minimum Inhibition concentration (MIC) and Minimum Bactericidal concentration (MBC) assay indicated that there were significant growth inhibition of the bacterial strains against water and chloroform extracts of rip banana peel and n-hexane and chloroform extraction of green banana peel ($P < 0.05$). The GC/MS analysis of the active extracts of green banana peels from n-hexane and chloroform revealed their molecular weight and the presence of palmitic acid with 27.38% and 16.17% respectively. In conclusion present study indicated that the active extraction of n-hexane and chloroform of green banana peel has a considerable amount of potential antibacterial compounds.

ID 58: Public awareness of benefits of *Ginkgo biloba* in memory dysfunction and choice of brands among pharmacists in Alor Star, Kedah & Kuantan, Pahang

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Aging causes a regression of physiological function. Complaints of declining memory are common with advancing age. Ginkgo extracted from leaves of *Ginkgo biloba* (maidenhair tree) has neuroprotective properties against memory dysfunction and neuronal death in Alzheimer's disease. The objective of this study was to determine the public awareness of benefits of *Ginkgo biloba* in memory dysfunction and choice of brands among pharmacists in retail pharmacies located around Alor Star, Kedah and Kuantan, Pahang. A randomized cross sectional study with the participants of customers age 40 years and above was conducted in 25 retail pharmacies in Alor Star, Kedah and 16 pharmacies in Kuantan, Pahang. The data was obtained through face to face interview guided by structured questionnaire. Only 32 out of 168 participants were the users of *Ginkgo biloba* while remaining 80.95% did not take any supplements to improve memory. *Ginkgo biloba* was widely used by elderly people, age range of 61-70 years old, for adjunctive therapy and 62.5% of users were Chinese, 20.12% were Malays and 9.38% were Indians. 71.87% of them were recommended by their doctors or pharmacists. The entire 32 users were satisfied with the product whereby 20 users have consumed it more than a year. The longest duration of taking *Ginkgo biloba* products was 8 years while the shortest duration was 3 weeks. 31.25% of them used the product to improve memory. The awareness of existence of Ginkgo product was 64% but awareness of benefits in memory dysfunction was still low (38%). 35% of respondents believed that they did not need the supplements where as 28% quoted that the supplements were expensive. Tebonin forte film coated tablet which was the pioneer of the product was the most trusted brand among the pharmacists. Reasons of pharmacists for choosing the certain brand were reliability (46.34%), customers' demand (24.34%) and promotion by suppliers (29.27%). The stock turn over for the product was 49% of pharmacies reorder their stocks between 4 to 6 months. In conclusion, *Ginkgo biloba* was a supplement known to improve memory but the benefits was yet to be known by the public. The pharmacists chose certain types of brand was due to the reliability and also wanted to acknowledge and introduce the supplements that could help to boost and improve health.