Ethnobotanical Indices for Traditional Vegetable and Herbal Medicine Species Consumed in Kota Belud, Sabah, Malaysia

ABSTRACT

The difference of traditional vegetable species used in two predominantly Sama Bajau villages: Kampung Taun Gusi and Kampung Menunggui, in Kota Belud, Sabah were determined with different strategies. Similarity of listed species between different villages was determined by using Jaccard’s index of similarity and the most useful plants were evaluated using Frequency of Citation (FC). Use Value (UV) was used to determine the citation of plants during semi-structured interviews. A total of 46 species of traditional vegetables from 41 genera and 25 botanical families were listed from two villages. Jaccard’s index of similarity for ulam species between two localities; Kampung Taun Gusi and Kampung Menunggui is revealed at J = 0.348. Meanwhile Jaccard’s index of similarity for species that have been also served as traditional herbal medicine for both villages is revealed at J = 0.111. In average, informants cited 7.67 ± 3.89 vegetable taxa, the highest frequency citation (FC) calculated for Cosmos caudatus, Centella asiatica, Musa paradasiaca, FC= 0.83 for all three species. Meanwhile the FC calculated for Ipomea batatas, Cucumis sativus, Vigna unguiculata, Artocarpus heterophyllus value at 0.67. Use value for C. caudatus and C. asiatica are both recorded at UV = 1.67. Two species from family Fabaceae recorded UV ≥ 1.00; V. unguiculata (1.33) and Abelmoschus esculentus (1.00). Other species that recorded UV ≥ 1.00; C. sativus (1.33) and Capsicum annum (1.00). There was no significance difference (p > 0.05) between genders and knowledge on traditional vegetables. These data could provide the baseline for preservation of traditional knowledge and for bio-prospecting since some selected vegetables that are also used as traditional medicine. These three species, C. caudatus, C. asiatica, and M. paradasiaca, should be given priority in sustainable management of food plant species in Kota Belud.