A strategy for plant conservation in Johor plant chemical library

Abstract

Malaysian tropical forests harbor about 6% of the world's plant species. Most of this huge array of plant species has not been widely studied. The uses of each plant species bogs down to the properties of chemicals embedded in it. Therefore, a library of chemicals found in these plants must be developed. A Plant Chemical Library (PCL) has several benefits and were discussed in this paper. It will be a database for natural heritage and a source for future effort in herbal remedies or drug development in Malaysia. It also has potential to be useful for the global community through pharmaceutical, cosmetic and nutraceutical industries. These benefits would also incur monetary arrangement. However, issues and challenges are expected which include the development of dedicated laboratory facilities, training of human resources, and a special storage system for the chemical extracts. Selection of plants can be done based on plant groupings, disease of interests, and collaboration with the particular ethnic and selection of plants according to its traditional use. This effort would at the same time cater for the need to document traditional knowledge (TK) in an effort to conserve them. Hence, issues of PIC and ABS prior to bioprospecting have to be made clear. Stakeholders are suggested to come out with a legislation that will govern how best to go about doing bioprospecting in Johor to facilitate scientific endeavors and biodiversity conservation.