Syarahan PERDANA 2010

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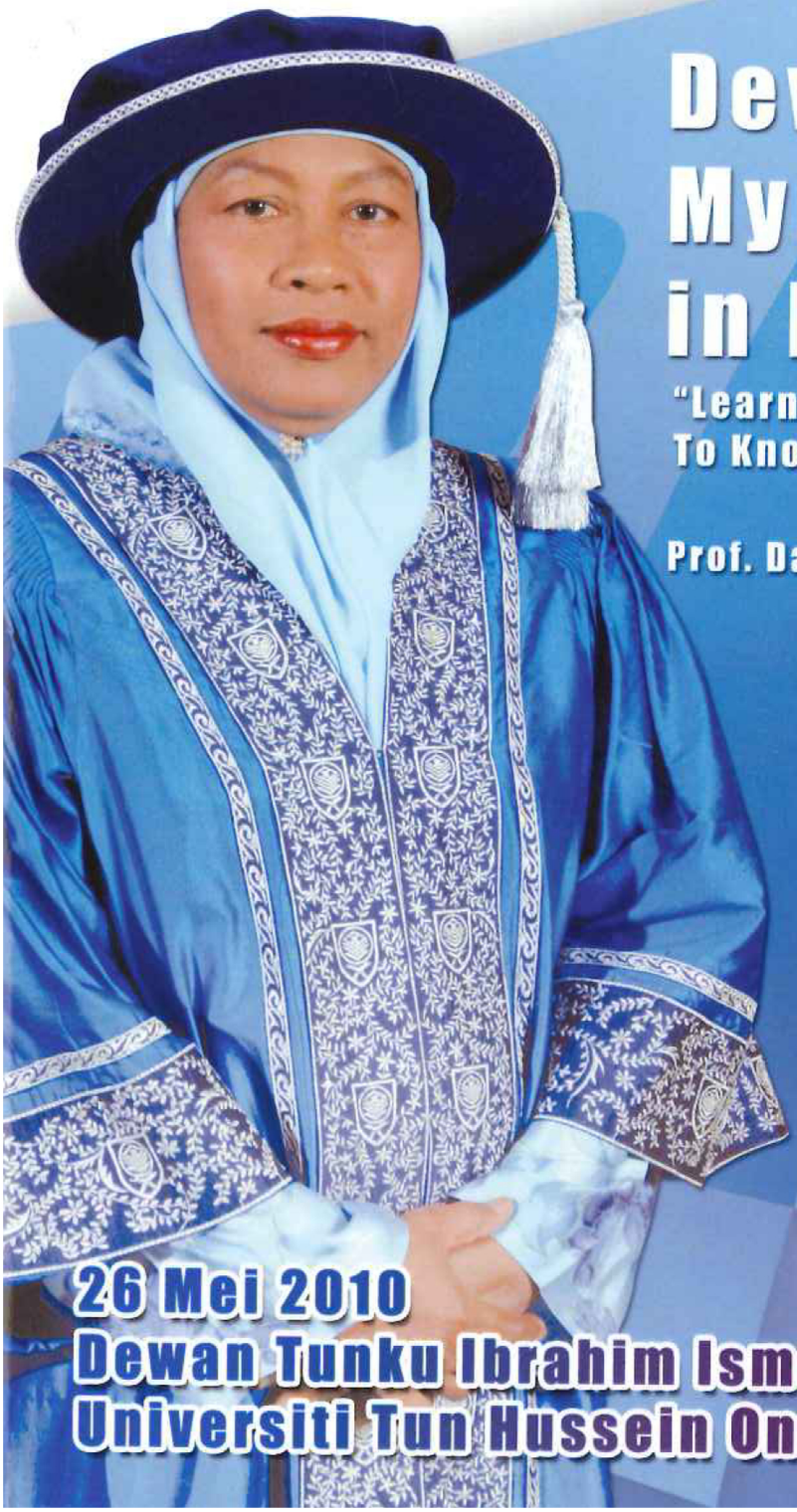

Development of Myrmecology in Malaysia

"Learn From The Amazing Small Ant: To Know Ants Is To Love Ants".

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Preface

Myrmecology is the study of ant. Ant is a tropical insect found in abundant and huge diversity along the tropical region in the forests of Amazon and the rest of Central American tropical forests, Central Africa, India, South East Asia and tropical Asia and tropical Australia. The interest to study ants has been established as early as the 1600s by European naturalists. During the colonial periods of 1700 to 1800 and early 1900, naturalists and expatriates from Europe who visited and stayed in these tropical regions began collecting ants and bringing them back to their home countries. At present, Malaysian ants are found all over the world especially in Europe. In the later years, early 1990s, the interest on myrmecology of the tropical Asia had roused interest of Asian scientists particularly from Japan. Currently, countries like Thailand, Vietnam, Indonesia, Taiwan, Korea, China (including Hong Kong) are rapidly developing Asian myrmecology. Malaysia is no exception.

In this book, the development of myrmecology is described. Prior to 1985 there were few publications on ant, except for some ecological research by the German scientists. Malaysian scientists tend to focus on ant that is effective to control cocoa pest, the ant species *Dolichoderus thoracicus*. 1985 is seen as the point of time when development on myrmecology started. It began with the interest of a student to study ant ecology, especially its feeding behavior. Thereafter, more ecological works on ants were carried out and intensive collection of ants, done. The setting up of reference collections with good taxonomic support is critical to myrmecology development, and that was addressed first. Now Malaysia can claim having a reference collection of Malaysian ants, based in Malaysia in a facility called BORNEENSIS at Universiti Malaysia Sabah. The scenario has change, from having to visit European museum for any ant identification to referring to what we have, in Malaysia itself. Duplicates specimens are, however, placed in some collections especially in Japan.

This book explains ant as an insect, how it differs from other insects especially termites, with which it has often been confused. It goes on to describe the several scientific expeditions and collecting exercises from several parts of Malaysia especially Sabah. These had accumulated in a large number of specimens in the collection at BORNEENSIS. Naming them however, is not easy and thus, taxonomic support by colleagues especially from Japan is much appreciated. To describe the development further few research findings are highlighted. These are clustered under several headings: Collecting techniques and distribution patterns of Malaysian ants, Ants behaviour (feeding and defense), Ants interaction (ant-plant and ant-insect), Ants as indicator of environment, Effect of forest disturbances on ant fauna and finally Ant taxonomy.

Having known the several aspects of ant, recommendations on how to go forward in Malaysian myrmecology are made. To facilitate discussion, the recommendations were made under three main sectors : education, economic and management. These suggestions are offered for the general Malaysian scientific community. For scientists at Universiti Tun Hussein Onn Malaysia, a separate proposal is made. Ants can be useful to many disciplines, as has been seen before. Perhaps scientists at UTHM could make use of ant in their future research. This book ends with acknowledgement to all those that has contribute to the development of myrmecology in Malaysia. The author wishes to declare that there are many other works on ants carried out by other Malaysian scientists, but time