

VII. MODERN SYSTEMATICS, A FURTHER BOTANICAL NOTE.

As noted in Dr L.G.M. Baas Becking's Postscript to Mr van Bommel's article in *Chronica Naturae* Vol. 104, part 4, the new systematics has not been entirely neglected by botanists. I would like to put a further botanical viewpoint on this

subject. Firstly, I suggest that there is no sharp distinction between the old systematics and the new; secondly, I would emphasize that systematics of the primary descriptive type are an essential basis for the new systematics, and that we are still a long way from completeness in our primary systematic study of Malaysian plants.

Systematics of the primary descriptive type need not be out of touch with modern scientific thought. The field botanist in the tropics cannot regard the subject of his study as dead material. But his first job is to classify his material so that others may have an intelligible guide to it. And he cannot classify it without some recognized code of procedure and of nomenclature. It is true that in the past the choice of the correct name for a taxonomic group has too often occupied "the central position of systematic work". But to a botanist with a modern scientific outlook, the search for the correct name is merely the last step in a study, a step necessary in order to correlate his work with what has gone before.

Here in Malaysia we have an enormous amount still to do before we can have a reasonably complete comparative account of all the flowering plants existing in our region, and only when such a full survey is made will the would-be new systematist know what material is available for his study. This primary survey must be done in the main by the methods and by the rules of the old systematics, but it can be done intelligently and with an eye to the needs of the workers who will carry the study a stage further.

The new *Flora Malesiana* will help to show us how wide are the gaps in our knowledge. One thing much needed is field collecting by men with specialized knowledge. Too much of the material in our herbaria was gathered casually by people without such knowledge. Often, in looking over such material, one wishes one could have been there to collect some additional specimen to show further significant characters. And nobody can estimate how many species have been overlooked from lack of knowledge and not from lack of opportunity.

I venture to suggest that many academic botanists who have not been trained in systematics of any kind, do not realize how large a number of tropical plants have not yet received adequate study of the traditional type, nor how inaccurate and incomplete is some of the morphological information in existing monographs. There is no need to despise primary systematics. I wish that more botanists would lend a hand to remedy the deficiencies of our basic knowledge of tropical plants. Only when this is done shall we realize the extent of our heritage in the wealth and variety of the plant world, and its potentialities for human use and for the advancement of human knowledge.

Botanic Gardens, Singapore.

R.E.Holttum.