

Proceedings of the First International Workshop  
on Lower Lepidoptera

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*Sugadaira Montane Research Center, University of Tsukuba  
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Organized by Michael Friedländer and Hiroshi Ando*

### First International Workshop on Lower Lepidoptera

The lower Lepidoptera display an extraordinary diversity, considering that they are a small group of insects which comprises only about 1% of all the extant Lepidoptera, in contrast with the higher lepidopterans which are remarkably structurally homogeneous although they comprise 99% of the order. Some of the genera and families of lower Lepidoptera are known from a few specimens only, or even from just a single specimen; almost nothing is known concerning the habits, distribution, larvae, reproduction, internal morphology, etc. of these taxa. Furthermore, the related fossil data is still scarce and fragmentary. These facts are reflected in the scientific literature by discrepant interpretations concerning the phylogenetic relationships, both among the lower lepidopterans and between the lower and higher lepidopterans. Therefore, there has been an urgent need for a formal forum dedicated exclusively to interchange, integration and discussion of the existing data and ideas related to this group. After extended preliminary consultations, we decided to call a relatively small group of scholars from America, Australia, Asia and East and West Europe to come together at the Sugadaira Montane Research Center, University of Tsukuba, for a critical examination of the existing data and to pave the way for future cooperation. These scholars represent a broad spectrum of sometimes seemingly distant fields of interest such as morphology, embryology, ecology, phylogenesis, reproduction, ultrastructure, behaviour, paleontology, systematics, etc. The diversity of the approaches to the study of lower Lepidoptera that have been purposely selected for the workshop, is well represented by the works appearing in this volume. From the vivid and deep discussion of the extremely heterogeneous data, presented at the workshop, it has become clear to the participants that to overcome the existing objective difficulties it will be necessary to resort to cooperation and collaboration among colleagues using different scientific approaches when analyzing problems concerning phylogenesis of lower Lepidoptera. The best indication that the results of the workshop fulfilled our expectations is that the participants have unanimously concluded that this forum should be made permanent and that the number of participants and the scope of future meetings should be broadened. Invitations have already been sent for the next meeting to be held in Canberra, Australia.

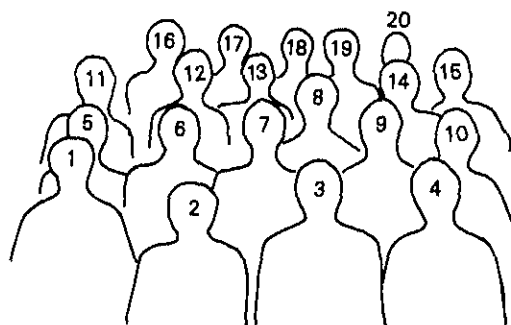
The organizers wish to thank Dr. K. BABA, Dr. Y. KOBAYASHI, Dr. R. MACHIDA, all the staff of the Sugadaira Montane Research Center and Sanada Town in the name of all the participants and their own for their important contribution to the success of the workshop.\* They did not spare time, nor efforts, in making our stay comfortable, pleasant and interesting in this beautiful area of Japan.

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**List of participants**

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Workshop photograph taken at the entrance to the Sugadaira Montane Research Center, University of Tsukuba, July 30, 1989 :

1. K. MIYA, 2. M. FRIEDLÄNDER, 3. H. ANDO, 4. H. KUROKO, 5. H. INOUE, 6. A. MUTSUURA, 7. N. P. KRISTENSEN, 8. Y. S. BE, 9. E. S. NIELSEN, 10. S. SUGI, 11. M. OWADA, 12. T. KUMATA, 13. N. HIRANO, 14. A. W. SKALSKI, 15. R. MACHIDA, 16. F. KOMAI, 17. H. UEMIYA, 18. M. TANAKA, 19. Y. KOBAYASHI, 20. H. HASHIMOTO.

Not in photograph : K. HAGA, T. YASUDA.

**Programme**

*July 29*

Welcoming reception at the Sugadaira Montane Research Center

*July 30*

Opening address by H. ANDO

Morning session (Chairman, E. S. NIELSEN):

Recent studies on Lower Lepidoptera 1 ; two papers by N. P. KRISTENSEN and H. KUROKO

Afternoon session (Chairman, M. FRIEDLÄNDER):

Recent studies on Lower Lepidoptera 2 ; three papers by N. P. KRISTENSEN, E. S. NIELSEN,  
and Y. KOBAYASHI and G. W. GIBBS

Evening meeting :

The Australian Lepidoptera and their habitat. by E. S. NIELSEN (informal talk)

*July 31*

Excursion : One-day trip to Shiga-Heights and Mt. Shirane

*August 1*

Morning session (Chairman, A. MUTUURA):

Moth-studies in Japan ; two papers by H. INOUE and S. SUGI

Afternoon session (Chairman, N. P. KRISTENSEN):

Phylogeny of Lower Lepidoptera ; four papers by M. FRIEDLÄNDER, A. MUTUURA, A. W.  
SKALSKI, and E. S. NIELSEN

Closing address by M. FRIEDLÄNDER

Farewell party at Sugadaira Hotel

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