

# **Hypsipyla Shoot Borers in Meliaceae**

**Proceedings of an International Workshop held at  
Kandy, Sri Lanka 20–23 August 1996**

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# CONTENTS

Foreword v

## Country Reports

*Hypsipyla* Shoot Borers of Meliaceae in Sri Lanka  
*D. Tilakaratna* 3

*Hypsipyla* Shoot Borers of Meliaceae in India  
*R.V. Varma* 7

*Hypsipyla* Shoot Borers of Meliaceae in Bangladesh  
*M.W. Baksha* 10

*Hypsipyla* Shoot Borers of Meliaceae in Philippines  
*E.B. Lapis* 15

*Hypsipyla* Shoot Borers of Meliaceae in Vietnam  
*Nguyen Van Do* 18

*Hypsipyla* Shoot Borer of Meliaceae in Lao PDR  
*Xeme Samontry* 20

*Hypsipyla* Shoot Borers of Meliaceae in Thailand  
*Supachote Eungwijarnpanya* 22

*Hypsipyla* Shoot Borers of Meliaceae in Malaysia  
*Khoo Soo Ghee* 24

*Hypsipyla* Shoot Borers of Meliaceae in Indonesia  
*Oemijati Rachmatsjah and F.R. Wylie* 31

*Hypsipyla* Shoot Borers of Meliaceae in Papua New Guinea  
*J. Dobunaba and T. Kosi* 33

*Hypsipyla* Shoot Borers of Meliaceae in Solomon Islands  
*M.L. Ngoro* 37

*Hypsipyla* Shoot Borers of Meliaceae in Australia  
*M.W. Griffiths, F.R. Wylie, R.B. Floyd and D.P.A. Sands* 41

The Forest Resource of Ghana and Research on *Hypsipyla robusta* (Moore) (Lepidoptera: Pyralidae) Control in Mahogany Plantations in Ghana  
*S.K.N. Atuahene* 58

A Review of *Hypsipyla grandella* Zeller Research in Pará State, Brazil  
*M.M. Maués* 63

## Taxonomy, Biology and Ecology

Current Status of the Taxonomy of *Hypsipyla* Ragonot (Pyralidae: Phycitinae)  
*M. Horak* 69

The Biology and Ecology of *Hypsipyla* Shoot Borers  
*M.W. Griffiths* 74

Biology and Impact of *Hypsipyla robusta* (Moore) on *Toona ciliata* M. Roem. in Himachal Pradesh  
*T.D. Verma and N. Kaul* 81

Discussion Summary — Taxonomy, Biology and Ecology of *Hypsipyla* spp.  
*M.W. Griffiths* 85

### **Host Plant Resistance**

Research in Mahoganies to *Hypsipyla* Species — A Basis for Integrated Pest Management  
A.D. Watt, A.C. Newton and J.P. Cornelius 89

Research into Species of *Cedreia* and *Swietenia* in Honduras including Observations on Damage by *Hypsipyla* sp.  
D.A. Mejía 96

Within-tree Distribution of Feeding Sites of Larvae of *Hypsipyla robusta* (Moore) (Lepidoptera: Pyralidae)  
J. Mo, M.T. Tanton and F.L. Bygrave 102

Discussion Summary — Host Plant Resistance for Control of *Hypsipyla* spp.  
A.D. Watt 106

### **Chemical Control and Pheromones**

Control of *Hypsipyla* spp. Shoot Borers with Chemical Pesticides: a Review  
F.R. Wylie 109

Semiochemicals of *Hypsipyla* Shoot Borers  
T. Bellas 116

Discussion Summary — Chemical Control and Pheromones of *Hypsipyla* spp.  
F.R. Wylie 118

### **Biological Control**

Prospects for Biological Control of *Hypsipyla* spp. with Insect Agents  
D.P.A. Sands and S.T. Murphy 121

Entomopathogens for Control of *Hypsipyla* spp.  
C. Hauxwell, C. Vargas and E. Opuni Frimpong 131

Indigenous Parasitoids and Exotic Introductions for the Control of *Hypsipyla grandella* (Zeller)  
(Lepidoptera: Pyralidae) in Latin America  
H. Blanco-Metzler, C. Vargas and C. Hauxwell 140

Discussion Summary — Biological Control of *Hypsipyla* spp.  
D.P.A. Sands and C. Hauxwell 146

### **Silvicultural Control**

Silvicultural Management of *Hypsipyla* Species  
C. Hauxwell, J. Mayhew and A. Newton 151

Ecology and Possible Control of the Mahogany Shoot Borer *Hypsipyla robusta* in Kerala, India  
K. Mohanadas and R.V. Varma 164

Discussion Summary — Silvicultural Management of *Hypsipyla* spp.  
C. Hauxwell 166

### **Integrated Pest Management**

Integrated Pest Management of *Hypsipyla* Shoot Borers  
M.R. Speight and J.S. Cory 169

Integrated Management of *Hypsipyla grandella* in Nurseries and Plantations of Meliaceae in Cuba  
A.D. Casanova, J.M.M. Torres, M. del C.B. Smith, J.R.M. Barroso and A.A. Rito 175

Discussion Summary — Integrated Pest Management of *Hypsipyla* spp.  
M.R. Speight 179

### **Research Priorities and Conclusions**

International Workshop on *Hypsipyla* Shoot Borers in Meliaceae: General Conclusions and Research Priorities  
R.B. Floyd 183

Participants 188

## Foreword

IT HAS been a most welcome and opportune initiative of CSIRO Entomology and the Queensland Forestry Research Institute (QFRI) to organise an International Workshop on *Hypsipyla* which was hosted by the Forestry Department of Sri Lanka and supported financially by ACIAR, DFID, AusAID and RIRDC. The papers presented at the meeting and now incorporated in these Proceedings reflect both the current 'state of the art' and the involvement of a great number of national and international institutions and organisations in research on the shoot borers of the Meliaceae. No less than 35 participants from 16 countries, representing 25 institutions and organisations have been involved in the workshop.

The organisers of the workshop are to be congratulated for the intercontinental and participatory approach of the meeting, which provided a binding element in the search for a common solution to a common problem. Hopefully, these contacts can be maintained and perhaps even expanded into effective international collaboration. As it has been more than 20 years since the First Symposium on Integrated Control of *Hypsipyla* was held in Turrialba, Costa Rica, by the Inter-American Working Group on *Hypsipyla*, the Kandy workshop also represents the end of a long period of discontinuity in major international co-operative research on the relationship between the valuable Meliaceae and their most intractable insect pest *Hypsipyla* spp.

The current international need to find a solution to the age-old shoot borer problem is given impetus by the rapid erosion of genetic sources of the Meliaceae in most of the continents. In 1992, during the Earth Summit at Rio de Janeiro, ecologists and biologists predicted that 10–20% of the earth's estimated 10 million species of plants and animals would have become extinct by the year 2020. Of these, 50% were likely to be lost due to disappearing tropical rainforests.

Meanwhile, *Swietenia humilis* and *S. mahagoni* have been listed on Appendix 2 of the Convention on International Trade in Endangered Species (CITES), while the inclusion on Appendix 2 of *S. macrophylla*, currently listed on Appendix 3, was considered. The inclusion of the mahoganies on this list obliges timber companies to formalise the export from the countries of origin and forces the governments of exporting countries to warrant that the species is still adequately stocked in the forests. Trade in these species is not prohibited. However, in a number of Western European countries, a discussion is currently taking place to limit the import of tropical timber species to only those that are produced on a sustained yield basis. That would clearly pose a problem with regard to species of Meliaceae such as the cedars and mahoganies for which, notwithstanding all efforts in the past, no viable silvicultural system exists yet in the countries of origin, not even in Australia.

Fortunately, CSIRO Entomology and the QFRI are taking up the challenge to find a solution for the shoot borer problem in a multidisciplinary approach. A stimulating interaction between disciplines, in addition to motivated Ph.D candidates and post-graduate students, forest nursery facilities, experimental plantation areas and last but not least a mass rearing program, were a few of the key factors that resulted in a high research productivity of the Working Group on *Hypsipyla* at CATIE in Turrialba, Costa Rica. It was most encouraging to learn that research on the shoot borer has again been taken up at CATIE.

Among the important research subjects that remained largely undeveloped after the research in the 1970s and 1980s were silviculture and ecology of the Meliaceae, i.e. soil and site selection, silvicultural systems of line or group plantings in existing wet and dry forests and the degree of heterogeneity of mixed plantations. To determine the place of the Meliaceae within the complex environment of the tropical forest, with its multiple interdependent biological networks, requires long-term research and consequently substantial funding. Researchers as well as funding agencies experience that prospect as a barrier. To pass that barrier the co-ordinated support of several development agencies and sponsors, as well as the close collaboration of Forest Services, might be necessary.

In my home in the Midi-Pyrenees, I still keep a potted plant of Spanish Cedar (*Cedrela odorata*) which is now a little over eight years old. With its long pale green leaves, it has a graceful appearance and reminds me of the time I worked on *Hypsipyla*. Every other winter, when it has become too tall, I cut it back to some 5 cm above the soil and stop watering it until next spring. To be frank, I once hoped that it would grow into a small twisted Bonsai tree. However, every time it revives, it produces several buds on its trunk, which are all eventually suppressed except one that grows into a new long straight leader; a most promising sign. More promising, however, is that a new generation of scientists has found a common basis to work on the strategies and priorities that have been set at the *Hypsipyla* Workshop. I am sure that all my old-time colleagues and fellow-researchers join me in wishing them persistence and resourcefulness to develop a method for reducing shoot borer damage to native Meliaceae to a tolerable level.

*Pieter Grijpma*