PREFACE

The VI International Conference on Regulation of Insect Reproduction was held September 1–6, 1996, in České Budějovice, Czech Republic. In a friendly and unofficial atmosphere, 48 participants presented 39 lectures and posters, which covered various aspects of current research on insect reproduction. Only a few contributions are included in this special volume of the *European Journal of Entomology*.

The Conference was dedicated to two retiring colleagues, Prof. Gerard R. Wyatt and Prof. Vladimír Landa. Tributes to these two scientists, written by H. Hagedorn and T. Soldán, respectively, can be found in the Conference Abstract Book, but a brief summary is provided here.

G.R. Wyatt grew up in British Columbia, Canada, where he also obtained a B.S. degree in 1945. After a one year study of entomology at the University of California at Berkeley, he moved to Cambridge University where, in 1950, he finished his Ph.D. studies on the composition of DNA of several organisms, particularly insect viruses. He found that the ratios of adenine: thymine and guanine: cytosine were close to one. He also discovered that in some organisms 5-methyl-cytosine and 5-hydroxymethyl-cytosine were present in place of cytosine.

During a year spent in the Insect Pathology Laboratory in Sault Saint Marie in Ontario, he began investigating the composition of insect hemolymph. After the move to Yale in 1954, Wyatt made the surprising discovery that the major blood sugar in many insects was trehalose, previously only known from fungi. With several of his co-workers he established the basis for our current understading of the regulation of carbohydrate metabolism in insects. He also discovered that glycerol concentrations were very high in diapausing *Hyalophora cecropia* pupae and correctly surmised that it may have something to do with prevention of injury due to freezing. At this time, he was introduced by Carroll Williams to the world of insect hormones which had a major effect on the direction of his subsequent work. The effects of ecdysone and juvenile hormone on pupal wing disk was the focus of his initial work in the area. When he moved to Queen's University in 1973, he turned with enthusiasm to the Migratory Locust, and began to study the role of juvenile hormone in regulating vitellogenin production. With his students he isolated locust vitellogenin, demonstrated that it is encoded by two genes, showed that expression fluctuates in concert with juvenile hormone, and made important advances in elucidating our understanding of the mode of juvenile hormone action on gene transcription.

In addition to this research, Jerry wrote a number of seminal reviews on diverse topics such as insect hemolymph, carbohydrates, hormones, plasma proteins, and gene regulation. He was chair of the Department of Biology at Queen's University for several years, and helped to organize, and several years directed, Insect Biotech Canada, a nationwide consortium of insect researchers.

Vladimír Landa was born in 1923 in West Bohemia. He enrolled as a student of biology at the Charles University of Prague when Czech universitites were re-opened in 1945. Shortly after obtaining his RNDr. degree he was drafted to the army where he spent more than two years. His professional career in science thus started in 1953 when he joined the newly founded Laboratory of Entomology of the Czechoslovak Academy of Sciences. He rapidly became a recognized specialist on the morphology, taxonomy, and ecology of Ephemeroptera. He described numerous new species and performed a thorough comparative analysis of the tracheal system, alimentary canal, Malpighian tubules, ventral nerve cord, and gonads of a wide variety of mayflies covering 80% of the world genera. Insect reproduction was another area of his interest. He started with the cockchafer, a serious pest at that time, and described in detail its spermatogenesis, oogenesis, and the structure, function and transfer of the spermatophore.

As a renowned entomologist and able administrator, Dr. Landa became first Director of the Institute of Entomology of the Academy of Sciences in 1962, and retained this position until 1990. During this time, he succeeded in transforming a small laboratory located in provisional spaces into an internationally recognized institute, which is part of a modern research campus. At the same time, he represented Czechoslovakia in a number of international scientific organizations.

Publications of Dr. Landa include 5 books and monographs and more than 150 original papers. The higher classification of Ephemeroptera and the monograph of the mayflies of former Czechoslovakia should specifically be mentioned. The works of Dr. Landa on the assessment of water quality from the communities of water insects, and on insect sterilization as an alternative method of insect pest control, are widely recognized.

On behalf of all participants I hope that both our highly esteemed colleagues Dr. Wyatt and Dr. Landa keep their interest in science and remain in touch with us.

František Sehnal