



## Remembering František Sehnal

It is with deep sadness that I remember František Sehnal deceased at the age of 83. For us, Bologna University entomologists, it was really sad to know, just when we were ready to download this issue online, that František Sehnal passed away.

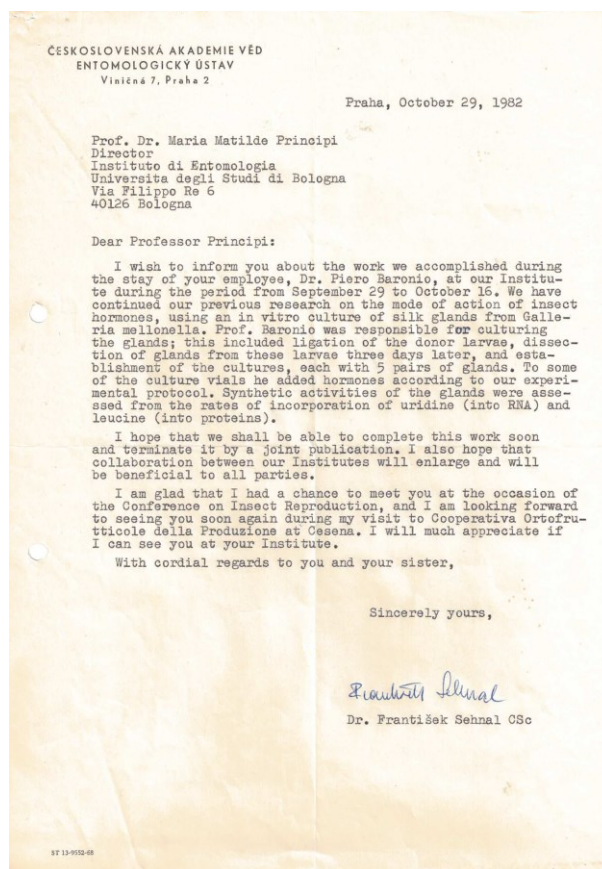
Since our first issue of the new series of Bulletin of Insectology, František Sehnal was collaborating as member of the editorial board.

Here in the group of Bologna we known very well the high scientific competence of František Sehnal on insect physiology and particularly insect hormones. František was guided in his earlier studies by Vladimír Novák and was a part of the famous team of Czech entomologists of the Entomological Institute of Czechoslovak Academy of Sciences of Prague. This happened since the pioneering research and experiments in the 1960s made by Karel Sláma and Carrol M. Williams (Biological Laboratories, Harvard University) on *Pyrrhocoris apterus* with the identification of the 'paper factor' (Juvabione). The school of Prague was the start of excellence works on the topic of insect hormones and natural or synthetic analogues. Furthermore, in Sehnal's labs in Prague the research on juvenile hormones gave the late colleague Piero Baronio (Istituto di Entomologia dell'Università degli Studi di Bologna) the idea and motivation for the study and demonstration of the hypothesis regarding the relationship between host hormones and parasitoid's development. So, the researches on insect hormones of the factitious host (*Galleria mellonella*) and their influence on tachinid parasitoids started before the 1980s, both in Prague and Bologna. One of the more important paper on this subject was: Baronio P., Sehnal F., 1980.- Dependence of the parasitoid *Gonia cinerascens* on the hormone of its lepidopterous hosts.- *Journal of Insect Physiology*, 26: 619-626.

Later on, other researchers continued the studies in both institutions (Bologna and České Budějovice), with other contacts and fundamental exchanges of knowledge. Insect hormone analogues and their potential for pest control have been further investigated for the development of selective insecticides such as "third and fourth generation" insecticides.

More recently, Antonio Martini went to the Sehnal labs where he could collaborate with entomologists from many countries as part of an international research, allowing the preparation of: Perez-Hedo M., Goodman W. G., Schafellner C., Martini A., Sehnal F., Eizaguirre M., 2011.- Control of larval-pupal-adult molt in the moth *Sesamia nonagrioides* by juvenile hormone and ecdysteroids.- *Journal of Insect Physiology*, 57: 602-607.

A particular anecdote, that I remember clearly, was when I met František, during his visit at the Institute of Entomology in Bologna. Curiously, as soon as he entered he run away out of the building to breathe in the open air! The reason: as many other entomologists that worked for years on one insect species, František was allergic to *G. mellonella* and showing strong symptoms as soon as he came in contact with people working on wax moth.



Here, I am reporting translated and reduced part of the text of obituary available on: <https://www.bc.cas.cz/novinky/detail/6239-zemrel-profesor-frantisek-sehnal-vyznamny-cesky-entomolog/>

### Professor František Sehnal, a prominent Czech entomologist, died

With deep sadness and regret, we announce that on Friday, November 26, 2021, Prof. F. Sehnal, a world-renowned expert in the field of entomology has passed away. In his research work, he dealt with the physiology of insects with a focus on the hormonal regulation of their development. He significantly contributed to the development of the Biological Center of the Academy of Sciences of the Czech Republic, of which he was the director in 2007-2012, as well as the Institute of Entomology, where he worked since 1962.

In the early 1990s, he was one of the founders of the Committee for the Establishment of the University of South Bohemia in České Budějovice, where he later lectured and served as Vice-Rector for Foreign Affairs (1992-1995). He is the author or co-author of more than 250 publications and has obtained 22 patent certificates.

He gained world fame for his work in the fields of endocrinology and developmental biology of insects - especially for his contribution to understanding the mechanism of hormonal regulation of ontogenetic development and reproduction. He also contributed to the use of knowledge in the development of biologically active substances of insect origin for pest control. He also studied silk and the practical use of its components in biomedicine. He and a team of other collaborators assessed the environmental risks of genetically modified crops.

František Sehnal is undoubtedly one of the most important Czech biologists, whose results and pedagogical skills have influenced several generations of scientists in the fields of insect physiology and entomology, not only in our country, but on a global scale.

Stefano MAINI