## **Book Reviews**

Chaverri P., Liu M., Hodge K. T. (2008). Neotropical *Hypocrella* (anamorph *Aschersonia*), *Moelleriella*, and *Samuelsia*. – Studies in Mycology **60**: 68 pp.

The issue presents a monograph of the entomopathogenic fungi belonging to the genera *Hypocrella* (sensu stricto), Moelleriella, and Samuelsia, the latter being newly proposed. Members of the three genera are insect pathogens frequently infecting scale insects (e.g. Coccidae) and whiteflies (e.g. Homoptera), common in tropical regions. Considering molecular and morphologic characters, the authors distinguish these three well-defined genera within Saccardo's broad concept of *Hypocrella*.

Within *Hypocrella*, seven species are accepted now: *H. aurantiaca*, *H. citrina*, *H. disciformis* Chaverri & K. T. Hodge, sp. nov.; *H. discoidea*, *H. hirsuta* Chaverri & K. T. Hodge, sp. nov.; *H. hypocreoidea*, and *H. viridans*.

Sixteen *Hypocrella* species are transferred to *Moelleriella* within which six additional new species are described by Chaverri & Hodge (*Moelleriella basicystis*, *M. boliviensis*, *M. cornuta*, *M. evansii*, *M. madidiensis*, *M. umbospora*).

The newly erected genus Samuelsa – named in honour of Gary J. Samuels for his great contribution to Hypocreales systematics – holds five new species: S. chalalensis, S. geonomis, S. intermedia, S. rufobrunnea, and S. sheikhii. Members of Samuelsia are characterised by filiform to long-fusiform ascospores that do not disarticulate and aschersonia-like anamorphs with small allantoid conidia.

The authors based their phylogenetic interpretation on the analyses of DNA sequences from nuclear ribosomal large subunit (28S), translation elongation factor  $1-\alpha$  (TEF  $1-\alpha$ ), and RNA polymerase II subunit 1 (RPB1), and on detailed analyses of morphological characters as well. The results are illustrated in two phylogenetic trees and 20 excellent colour plates which underline that the three segregated genera can be distinguished by the disarticulation of the ascospores and shape and size of conidia. Besides comprehensive information about the geographical distribution of the treated fungi, their habitat, host-specificity, nutrition, life cycle and epidemiology, detailed data on teleomorph-anamorph connections to accepted species are given.

Not only the growing economic importance of entomopathogenic fungi as biocontrol agents generates a strong demand for reliable identifications and proper phylogenies, but also dealing with more general biological tasks (e.g. ecology, distribution, evolutionary pathways of characters) must be based on proper classification. So, everyone who is interested in fungal pathogens of insects should not miss this monograph in her/his tool box.

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