

Z. Hubálek: The distribution patterns of fungi in free-living birds.

Acta Sc. Nat. Brno 8 (9): 1—51, 5 tables, 1974

Z. Hubálek: Fungi associated with free-living birds in Czechoslovakia and Yugoslavia.

Acta Sc. Nat. Brno 8 (3): 1—62, 18 figs., 2 tables, 1974.

The two studies by Dr. Hubálek are a valuable and important contribution to work in ornithology and mycology.

The first study is divided into 5 opportunely chosen chapters. The all-outlining abstract and the brief Introduction is followed by a well-arranged review of the fungi identified from the feathers, nests, pellets, droppings, contents of the cloaca and visceral organs of the individual bird species. In conclusion, a tabulated survey is given of the fungi found in the individual bird families. Chapter 2 deals with the occurrence of fungi in the various types of samples. Chapter 3 is concerned with the incidence of fungi belonging to various ecological and physiological groups. The individual paragraphs of this chapter deal with fungi potentially pathogenic to homeo- and poikilothermic animals, with plant-pathogenic, cellulolytic, keratinolytic and thermotolerant fungi. The distribution of fungi among birds with various habits is the subject of the following chapter. The last chapter is of particular importance in that it deals with migratory birds as carriers of some fungi. The Discussion contains a wealth of stimulating suggestions and the extensive material collected and elaborated by the author has fully been utilized. The list of the literature (75 references) comprises fundamental and recent studies on these problems.

Also in his second study, the author has shown great skill, accuracy and invention in solving the problems concerned. The brief Introduction is followed by a detailed description of the methods employed by the author for the purpose of obtaining all the data. In my opinion this chapter is absolutely adequate to the goal which the author has set himself. The

same applies to the detailed description of the material concerned. The study has been prepared with a view to giving a logically arranged, detailed list of species, genera, families and orders of fungi isolated from a wide spectrum of bird species. A continuity in the complex of problems concerned has been observed in that the same material has been used in both studies. In addition, for a number of fungi species the data have been completed with valuable notes and references to the literature covering a total of 160 papers by Czechoslovak and foreign authors. In spite of the large number of references the author has chosen them with utmost care. The number of tables is adequate to the extent of this study; their uniform arrangement underlines the clarity of concept exhibited by the author in both his studies. The black and white micro- and macrophotographs are of excellent quality.

The two studies reviewed are original and pioneering in that they cover systematically an as yet sparsely investigated field. The author's extensive knowledge of ornithology and mycology supported by long-term experience in field- and laboratory work have contributed appreciably to their success. It enabled him to suggest new approaches and present valuable new information for which we wish to thank him most sincerely. His efforts have been supported by valuable advice and critical remarks offered to him by the Scientific Editor of the two studies, RNDr. M. Olčenášek, CSc. and by the reviewer RNDr. K. Hudec, CSc. I wish to congratulate the author and all his collaborators on the success achieved in these studies. They will be a valuable source of information to all interested in these problems.

Dr. J. Dvořák, D.Sc.