

Reto Cramer, Mattia Garbani, Claudio Rhyner and Carly Huitema (2013). Fungi: the neglected allergenic sources. *Allergy*, 69:176-185.

Allergic diseases are considered the epidemics of the 21st century estimated to affect more than 30% of the population in industrialized countries with a still increasing incidence. During the past two decades the application of molecular biology allowed cloning, production and characterization of hundreds of recombinant allergens. In turn, knowledge about molecular, chemical, and biologically relevant allergens contributed to increase our understanding of the mechanisms underlying IgE-mediated type I hypersensitivity reactions. It has been largely demonstrated that fungi are potent sources of allergenic molecules covering a vast variety of molecular structures including enzymes, toxins, cell wall components and phylogenetically highly conserved cross-reactive proteins. Despite the large knowledge accumulated and the compelling evidence for an involvement of fungal allergens in the pathophysiology of allergic diseases, fungi as a prominent source of allergens are still largely neglected in basic research as well as in clinical practice. This review aims to highlight the impact of fungal allergens with focus on asthma and atopic dermatitis.