

## Accepted Manuscript

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PII: S1087-1845(14)00153-4

DOI: <http://dx.doi.org/10.1016/j.fgb.2014.08.010>

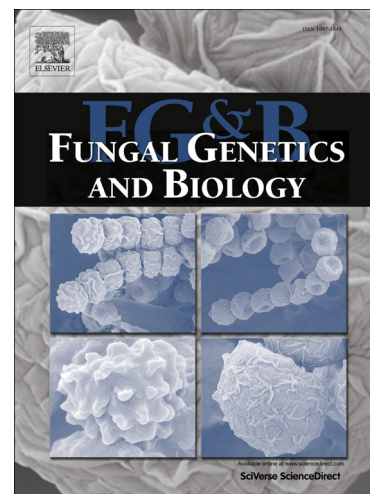
Reference: YFGBI 2722

To appear in: *Fungal Genetics and Biology*

Received Date: 10 July 2014

Revised Date: 19 August 2014

Accepted Date: 25 August 2014



Please cite this article as: Mäkelä, M.R., Donofrio, N., de Vries, R.P., Plant biomass degradation by fungi, *Fungal Genetics and Biology* (2014), doi: <http://dx.doi.org/10.1016/j.fgb.2014.08.010>

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## Plant biomass degradation by fungi

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### ABSTRACT

Plant biomass degradation by fungi has implications for several fields of science. The enzyme systems employed by fungi for this are broadly used in various industrial sectors such as food & feed, pulp & paper, detergents, textile, wine, and more recently biofuels and biochemicals. In addition, the topic is highly relevant in the field of plant pathogenic fungi as they degrade plant biomass to either gain access to the plant or as carbon source, resulting in significant crop losses. Finally, fungi are the main degraders of plant biomass in nature and as such have an essential role in the global carbon cycle and ecology in general.

In this review we provide a global view on the development of this research topic in saprobic ascomycetes and basidiomycetes and in plant pathogenic fungi and link this to the other papers of this special issue on plant biomass degradation by fungi.

*Keywords:* plant biomass degradation; ascomycetes; basidiomycetes; plant pathogens; industrial applications

### 1. Introduction

Plant biomass degradation has been a topic of research in fungi for many decades. Fungi are highly efficient degraders of plant biomass due to the fact that for many fungi this is the

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