

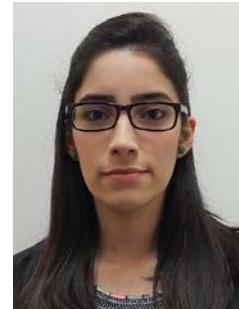


Ana Palacio-Barrera

Biopilot Plant

*Leibniz Institute for Natural Product Research and Infection Biology –
Hans Knöll Institute
Beutenbergstr. 11a
D-07745 Jena*

E-Mail: ana.barrera@hki-jena.de



PhD Project: Filamentous microbial co-culture for biotechnological production of natural products

Main Research Interests: Fungal biotechnology, filamentous bacteria biotechnology, mixed culture processes for filamentous microorganisms, enzyme production, Secondary Metabolite Production, higher fungi (mushroom) culture.

Methodological Experiences:

Basic Molecular Biology: DNA/RNA extraction: Fungi, bacteria and plant cells; protein quantification, PCR, electrophoresis, cloning

Cell culture, fermentations: Stirred tank culture, 7 and 14L and solid state fermentation of medicinal higher fungi (Basidiomycetes). Pigment producing Ascomycetes (*Eurotium* sp.) and imperfect fungi (*Fusarium oxysporum*).

Downstream processing: Extraction of metabolites; polysaccharides, anthraquinone, naphthoquinone, xanthone and terpene type. Spray drying, Freeze drying, diafiltration, protein chromatography.

Curriculum Vitae:

August 2013 – 2017: Master's Degree in Biology. Universidad de Antioquia, Colombia.
Master's thesis project: Obtainment of Natural colours from filamentous fungi: Implementation of a biotechnological process for its production and extraction.

2006-2011: B.Sc. Industrial/Environmental Microbiology. Universidad de Antioquia, Colombia
Monograph: Potential use of a medicinal mushroom in the manufacturing of functional ripened cheese.



Publications

Palacio-Barrera AM, Areiza D, Zapata P, Atehortúa L, Correa C, Peñuela-Vásquez M. (2019). **Induction of pigment production through media composition, abiotic and biotic factors in two filamentous fungi**, Biotechnology Reports. 21, e00308.

Dutilleul C, Ribeiro I, Blanc N, Nezames CD, Xing Wang D, Zglobicki P, Palacio Barrera AM, Atehortúa L, Courtois M, Labas V, Giglioli-Guivarc'h N, DucoS E. (2015). **ASG2 is a farnesylated DWD protein that acts as ABA negative regulator in Arabidopsis**, Plant Cell and Environment ISSN: 1365-3040, 38: 1-14.

Rojas-Vahos DF, Zapata-Ocampo PA, Palacio-Barrera AM, Ospina-Alvarez SP, Atehortúa L. (2013). **Basidiomycetes Mushroom Biotechnology for the Development of Functional Products: The Effect of Drying Processes on Biological Activity**. The Open Conference Proceedings Journal, ISSN: 2210-2892. 4: 93-98.