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#### ACCEPTED MANUSCRIPT

# Evaluation of a method using High Performance Liquid Chromatography with Ultraviolet detection for the determination of statins in macromycetes of the genus \*Pleurotus\* cultivated by fermentation processes.

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#### **Abstract**

The applicability of High-Performance Liquid Chromatography with ultraviolet light (HPLC-UV) for the determination of the presence of statins in macromycetes of the genus *Pleurotus* was analyzed. The fungi were obtained by liquid-state fermentation (LSF) using unconventional sources of carbon as substrates and solid-state fermentation (SSF) employing agro industrial wastes. Five statins were used as standards: lovastatin and simvastatin in the lactone form (LOVL and SIML), their corresponding hydro-acidic forms (LOVH and SIMH) and pravastatin (PRA). The following measures were evaluated: the linearity, accuracy and precision, detection limit (DL) and quantification limit (QL). The results demonstrated HPLC-UV to be an effective tool for detecting the presence of statins in extracts of LSF and SSF products. Likewise, it was hypothesized that the strains that

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