METHOD FOR PRODUCING LACTONES FROM A STRAIN OF *AUREOBASIDIUM PULLULANS*

ABSTRACT

The invention relates to a method for producing lactones from a strain of *Aureobasidium pullulans*. The invention is characterized in that the method comprises the following steps whereby: - a pre-culture of the *Aureobasidium pullulans* strain CBS 771.97 (obtained from CBS-KNAW Fungal Biodiversity Centre, Uppsalalaan 8, 3584 CT Utrecht, Netherlands) or the related strains thereof is produced; - from an inoculum obtained from the pre-culture, a culture is produced by fermentation at a temperature between 20°C and 40°C over a period of at least 3 days so as to produce metabolites, in a sterilized aqueous production medium containing: - a carbon source; - a nitrogen source; - a mineral salt solution; and - a calcium source, at a concentration between 2 and 100 mM; and - following the fermentation period, the metabolites produced are converted into a lactone mixture comprising (R)-5,6-dihydro-6-pentyl-2H-pyran-2-one (or (R)-(-)-massoia lactone) and/or (4R,6R)-4-hydroxy-6-pentyl-tetrahydro-2H-pyran-2-one.

Figure 6.