

(54) Title of the invention : A THERMOSTABLE PIGMENT COMPOSITION FOR ENCHANCED CANDLE DYEING AND METHOD THEREOF

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(57) Abstract :

7. ABSTRACT OF THE INVENTION: TITLE: A thermostable pigment composition for enhanced candle dyeing and method thereof

The present invention relates to the extraction and application of a newly discovered yellow pigment derived from the marine endophytic fungus >Malbranchea chrysosporidioidea, primarily found within Sargassum tenerrimum. The invention focuses on utilizing this pigment as a dye in various industrial sectors, with a specific focus on its integration into the candle manufacturing industry. The pigment offers unique biological properties, including antibacterial, anticancer, and antioxidant activities, rendering it suitable for use in pharmaceuticals, food, and cosmetics. The thermostable pigment composition obtained from the present invention is nonflammable and non-combustible nature ensures safety, particularly in candle manufacturing. The extraction and purification process involves utilizing an acetone extract of the fermented fungus, underscoring the pigment’s potential as an eco-friendly and non-toxic dye alternative. This invention explores the untapped potential of marine endophytic fungi in providing sustainable colorants with exceptional properties.

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